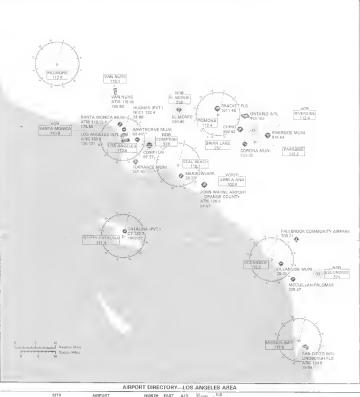
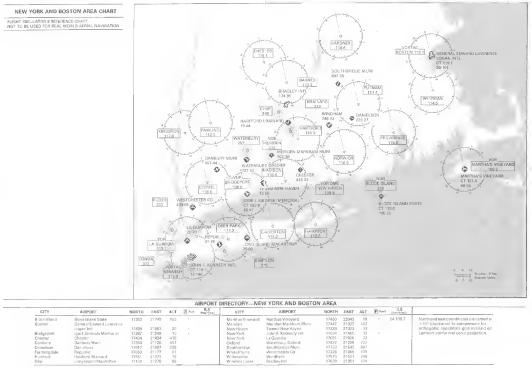
AIRPORT D	IRECTORY—CHICAGO AI	REA	CHICAGO AREA CHART
CITY AIRPOR		ALT First ILS	PLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AFRIAL NAVIGATION
orthogor	Illinoss W-layd 64000 16465 16474 16	705 887-917 705 97 97 97 97 97 97 97 97 97 97 97 97 97	COURT OF PARK OUTPAGE OUTPAG
E o o	LEGEND Civil Public use suport		TAGE OF THE TOTAL
« • •	Restricted Private Nonpublic us having emergency use or lands	se airport, mark value	
SANTA MONICA ATIS 119.15 176 50	Rotating light in operation, sun A roof Name Advisory Fraquency (if available Elevation fleet) — Length (hun	le)	PONTAC 1056 POSERTS 1168
NAME FREQUENCY «	VOR		GREGOM CITY MULA 1 755 22 0
NAME FREQUENCY	VORTAC IDistance Measuring I	Equipment Ablet	BLOOMINGTON NORMAL PAXTON 780 34
NAME FREQUENCY	VOR.DME		DANVILLE 13.0
NAME FREQUENCY VOR-DME	Non Directional Beacon If VOR falls directly on an auropat.	coly the auroct	MORTACE CHAMPAIGN PRASCA FIELD PRASCA FIELD SVERMILION CO 888 54
NAME FREQUENCY	symbol will be shown. The VOR! shown at the top of the box		L UNIVERSITY OF HUNGIS
AIRPORT NAME ABBREVIATI CO FLD INTL MUN (PVT)	ONS County Field International Municipal Physic Airport (pilor permission	belore landing)	VMLAND (FEAS) ATIS "ARE "MAD" 407. 754.01 August 10 Mes (FEAS) 0 5 5 Share Vice

FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD ARRIAL NAVIGATION.



CITY	AIRPORT	NORTH	EAST	ALT.	Fourt	ILS Pertiton	
Carlshad	McClennan-Palomai	14931	6112	328			North and east coordinates are canled a
	Catalina (PVT)	15149	5744	1602			19° (counterclockwise) to compensat
Chino	Chino	15319	6079	550			for arthogonal coordinate and overlaid
Compton	Compton	15.334	5859	9.7			on Lambert conformal conic projection
Corons	Chipne Mishi	15280	6083	533			
ElMonte	El Monte	15397	5952	296			
Fallbrook	Fallbrook Community Airpork	15023	6144	708			
Hawthorne	Hawthorne Muni	15358	5831	63			
Huntington Beach	Meadowlark	15244	5911	28			
LaVerne	Brackett Fld	15378	6038	1011			
Los Angelas	Hughes (PVT)	15388	5808	22			
Los Angeles	Los Angeles Inti	15374	5805	126			
Oceanside	Oceanside Muni	14974	8095	28			
Ontario	Ontario Intl	15347	6099	952			
Riverside	Riverside Muni	15288	6341	816			
San Diego	San Diego Inti-Lingbergh Fld	14761	8102	15	*		
Santa Ana	John Wayns Almort'						
	Orange County	16211	6961	E4			
Santa Monica	Santa Monica Muni	15402	5799	175			
Torrance	Tarrence Muni	15309	SRIS	101			
Van Nuvs	Van Nuvs	15498	5811	799		16R-111.3	



SEATTLE AREA CHART



CITY	AIRPORT	NORTH	EAST	ALT	Emil	ILS (May/Freq.)	
Alderwood Menor	Marthe Lake	21502	6670	500			North and east coordinates are canted as
Arlington	Arlington Muni	21616	6737	137			21° (countirclockwise) to compensat
Auburn	Auburn Muni	21290	bb86	67			for orthogonal coordinate grid overlaid
Bremerton	Bremerton National	21407	6470	481			on Lambert conformal const projection
Everett	Snohomish Ca	21625	8665	603		15/109.3	on constitution with projection
Issaguah	Issaquah	21302	8888	500			
Monroe	Flying F Banch	21481	6738	50			
Olympia	Olympia	21218	6343	206			
Puyallup	Pierce Co -Thun Fld	21208	6534	E30			
Port Angeles	William R. Fainchild Intl.	21740	6375	288			
Port Orchard	Port-Orchard	21373	6483	370			
Renton	Renton Muni	21351	6612	29			
Seattle	Boeing Fld King Co Intl	21376	6596	17			
Seattle	Henry M. Jackson Intl.	21343	6584	429			
	(Seattle-Tacoma Intl)						
Shalton	Sanderson Fld	21353	6316	278			
Snohomish Co (Pai	ne Field! see Everet!						
Snohomish	Harvey Fld	21506	6711	16			
Sparrawary	Shady Acres	21201	6501	425			
Spenaway	Spanaway	21215	6491	385			
Tacoma	Tacoma Natiows	21300	6480	292			

Abilene (VOR)

13431N 12205E freq. 113.7

Abilene

13384N 12269E alt. 1791

RWY 17-35 7199 X 147 RWY 17-35 7196 X 147 RWY 4-22 3683 X 98



Acton (VOR)

13330N 13014E freq. 110.6

Ada (NDB)

14331N 13461E free 302

Ada

14318N 13445E alt. 1007

RWY 17-35

4998 Y 98 RWY 12-30 3102 X 49



Amarillo (VOR)

14729N 11708F freq. 117.2

Amarillo Int'l

14687N 11686E RWY 4-22 13500 X 298 RWY 13-31 5405 X 49

Ardmore, Downtown Ardmore

14055N 13260E alt. 843 RWY 17-35

4998 X 72



Antlers (NDB)

14042N 13808E Freq. 391

Ardmore

14115N 13303E alt. 761 RWY 8-26

RWY 12-30

RWY 17-35

RWY 4-22

7222 X 147

7199 X 147

7038 X 147 6878 X 147



Antlers

14033N 13790E alt. 574 RWY 17-35

3299 X 59



Big Spring (VOR) 13460N 11604E frea, 114.3

Blue Ridge (VOR)

13659N 13521E freq. 114.9

Borger (VOR)

14943N 11828F freq. 108.6

Arbuckle (NDB)

14064N 13271F frea. 284

Ardmore (YOR)

14089N 13260F freq. 115.7

14875N 11824E alt. 3054 RWY 17-35

> RWY 3-21 3896 X 98

6297 X 98

3617 X 59

Bowie

13836N 13013E alt. 1102 RWY 17-35

Breckenridge (NDB)

13510N 12575F frea. 245

Breckenridge, Stephens Co.

13495N 12569E

alt. 1282 RWY 17-35

4598 X 98 2374 X 49



RWY 4-22 RWY 13-31 2374 X 49

Bridgeport (VOR) 13683N 13008E freq. 116.5



13125N 12506E freq. 108.6 Burns Flat (VOR) 14606N 12571F

14918N 12178F

freq. 110 Canadian, Hemphill Co.

Brownwood (VOR)

alt. 2385 RWY 4-22 RWY 0-18



Childress (VOR) I4271N 12142E freq. 117.6

Childress 14289N 12145E

alt. 1952 RWY 4-22

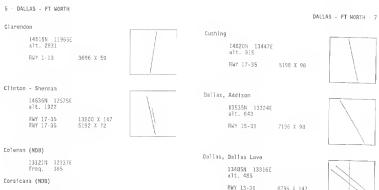
5999 X 147 5999 X 147 5999 X 147 4496 Y 72



RWY 8-26 RWY 13-31 RWY 17-35

Clarendon (NDB)

14530N 11952E freq. 281





13079N 13487E freq. 396

Cushing (NDB)

14809N 13462F freq. 242

Dallas, Meacham

13489N 13127E alt. 708 RWY 16-34 RWY 9-27

RWY 13-31

RWY 0-18

RWY 16-34

8795 X 147

7750 X 147

6146 X 147

Dallas, Redbird

13414N 13302E alt. 659

RWY 13-31 5421 X 147 RWY 17-35 3798 X 147

11384 X 147

11384 X 196

11384 X 196

11384 X 147

8997 X 196

Durant, Eaker

Eastland

13945N 13516E alt. 599

RWY 17-35 4998 X 98 RWY 12-30 2997 X 72

4054 X 59



Dallas-Ft.Worth (VOR)

13497N 13264E freq. 117

RWY 17-35

RWY 17-35

RWY 0-18

RWY 0-18

RWY 13-31

1351DN 132488

Dallas-Ft.Worth Reg. alt. 604



El Reno (NDB) 1467IN 13009F freq. 335

13363N 12588F

alt. 1469

RWY 17-35





RWY 17-35 4198 X 59



Duncan (VOR)

14189N 12997E

freg. 111

Durant (NDB)

13953N 13531F freq. 359

Farley (NDB)

13333N 11268E freq. 326



13840N 13220E alt. 833

> RWY 4-22 4749 X 147 RWY 12-30 4654 X 147 RWY 8-26 4598 X 147

RWY 17-35 4496 X 98 Graham (NDB)

13664N 12717E freq. 335

Graham 13649N 12709E

alt. 1122 RWY 3-21

RWY 17-35

14014N 12097E freq. 112.4

Grindstone Mountain (NDB) 13843N 13022E

frea. 356 Guthrie (VOR)

4198 X 72

Haskell (NDB) 13737N 12297E freq. 407 Haskell

Guthrie

13731N 12296E alt. 1624

RWY 0-18

14790N 13219E

alt. 1073

RWY 16-34

Hemphill CO. (NDB)

14938N 12177E

14577N 13714E

freq. 267

Henryetta (NDB)

freq. 400

2997 X 49



14439N 12605E freq.

14479N 12610E

14450N 13557E

freq. 411

alt. 1565

RWY 3-21

RWY 12-30 RWY 17-35

Henryetta

Hobart





Hudson (NDB) 13435N 1344CF freq. 248

Hudson Muni. 13432N 13426E alt. 446

3998 X 49

RWY 17-35

Hyman (VOR)

13337N 11725E freq. 110.4

Kingfisher (VOR) 14810N 13023E freq. 114.7

Lamesa (NDB)

13642N 11468E freq. 338

Lamesa

RWY 16-34 BWY 7-25

13639N 11476E alt. 2998

4198 X 72

2141 X 49

Holdenville 14437N 13542E alt. 863

Holdenville (NDB)

RWY 17-35

RWY 13-31



5297 X 147

5297 X 147 5277 X 147



14254N 12823E freq. 109.4

Logan Co. (NDB) 14808N 13231E

freq. 326

Lubbock (VOR) 14053N 11522E

freq. 109.2

Lubbock

14024N 11563E alt. 3280

RWY 17-35 RWY 8-26

RWY 17-35 2866 X 72 NcAlester (VOR)

14329N 13781F freg. 112

McAlester

14332N 13762F alt. 771 RWY 1-19

5598 X 98

11499 X 147

7999 X 147

RWY 17-35

NcKinney

Midland (VOR) 13338N 11320F freq. 114.8

Nillsap (VOR) 13468N 12902F

freq 117.7 Nineral Wells (NDB) 13497N 12883E

13621N 13433E

13616N 13419E

3998 X 72

alt. 581

fren. 311

frec. 255 Nineral Wells

> 13495N 12875E alt. 964

RWY 13-31 4323 X 98 RWY 17-35 4198 X 98

14550N 13187E

Norman (NDB)

freq. 260

Norman, Max Westheimer

Oklahoma City (VOR)

14535N 13175E alt. 1181

RWY 13-31 2997 X 59 RWY 17-35 1797 X 78

14645N 13090E

14600N 13139E alt. 1296

9800 X 147

9797 X 147

6527 X 147

2974 X 72

freq. 115 Oklahoma City, Will Rogers World

RWY 17-35

RWY 17-35

RWY 12-30



Pampa (NDB) 14836N 11955E

Freq. 368 14818ħ 11959E

Pampa, Perry Lefors

alt. 3244 RWY 17-35 RWY 5-23

Paris (VOR) 13748N 13864E



freq. 113.6 Paris, Cox

13787N 13850E alt. 548

RWY 17-35



5497 X 98

4496 X 72



RWY 17-35 Okmulaee (VOR)

14699N 13777E

freq.

Old Rip (NDB) 13355N 12592E

frea. 410

RWY 3-21 RWY 13-31

Plainview (VOR)

14216N 11587E freq. 112.9

Plainview, Hale Co.

1423BN 11627E alt. 3372 RWY 4-22 RWY 13-31

5195 X 98 3998 X 98

Powell (NDB)

13094N 13480E frea. 344

Quitman (VOR) 13876E

freq. Redbird (NDB)

13415N 13314E freq. 287

Sayre (VOR) 14669N 12424E 115.2 freq.

Scotland (NDB)

13951N 12769E freq. 344 Scurry (VOR)

13302N 13504E frea. 112.9

Stephenville (NDB) 13254N 12819E freq. 223 Sulphur Springs (VOR)

Shawn (NDB)

Shawnee (NDB)

Shawnee

13999N 12784L

14580N 13382F freq. 227

14564N 13368E alt. 1079

frea.

13600N 13820E freq. 109 Sweetwater (NDB)

13451N 11984E freq. 275

Tahlequah (NOB) freq. 215

RWY 17-35

4198 X 147

14781N 14089E

14763N 14067E

Tahlequah

14917N 13821E freg. 114.4

3197 X 59

Tulsa (VOR)

alt. 872

RWY 17-35

Tulsa Int*1 14913N 13778E

alt. 676 RWY 17-35 9997 X 196 7694 X 147 RWY 8-25 RWY 17-35 5497 X 147

Tuscola (VOR)

13322N 12211E freq. 111.6

weetwater

13448N 11987E alt. 2385 RWY 16-34 5841 X 72 RWY 3-21 5648 X 147

Witchita Falls (VOR) 14039N 12735E

freq. 112.7

Witchita Falls 14024N 12764E alt. 1014

> RWY 15-33 13097 X 298 RWY 15-33 RWY 17-35 8796 X 147 6999 X 147



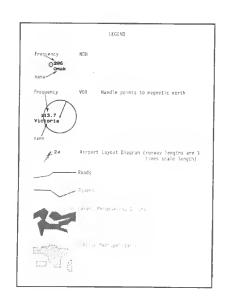


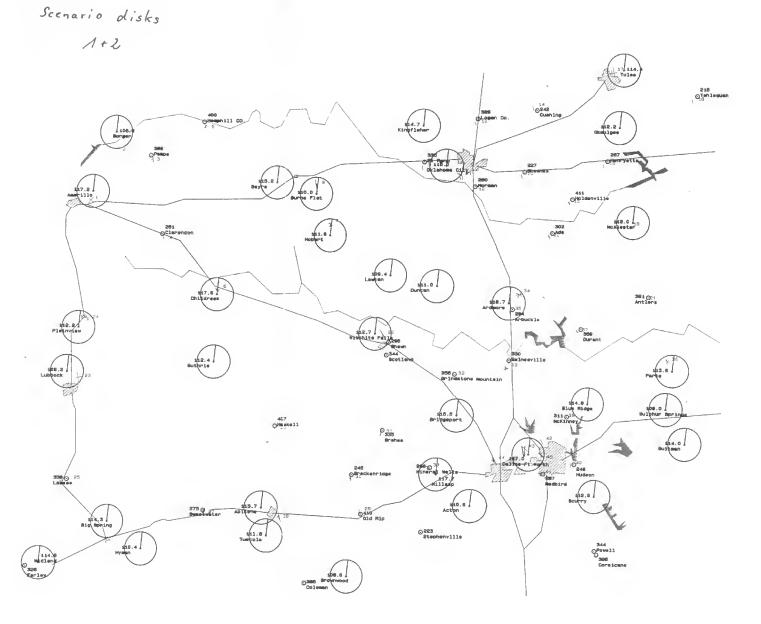






The





Acton (VDR)

13330N 13014E freq. 110.6

Alexandria (VOR)

12581N 14901E freq. 116.1

Alexandria, Esler Reg.

12624N 14989E

alt. 112

RWY 8-26 5995 X 147 RWY 14 32 5598 X 147



Andrau (NDB)

12042N 13663E freq. 269

Baton Rouge (VOR)

12202N 15323F

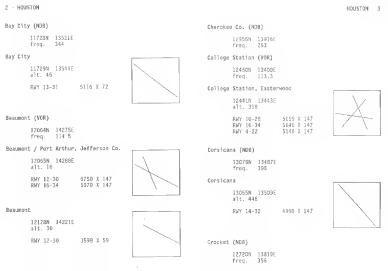
freq. 116.5

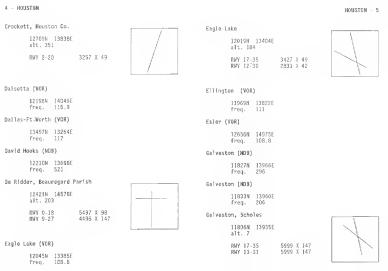
Baton Rouge, Ryan

12216N 15381E alt. 72

RWY 4-22 6897 X 147 RWY 13-31 5795 X 147

6897 X 147 5795 X 147





Goodhue (NDB) Houston, Hobby

12130N I4212E freq. 368 Hobby (VOR)

6 - HOUSTON

11993N I3781E freq. 117.6

Hodge (NDB) 13003N I4854E freq. 256

Houston Intercontinental

12137N I3786E alt. 98 RWY 14-32 11998 X 147

RWY 8-26 9400 X 147 RWY 14-32 6035 X 98 RWY 13-31 1981 X 72

Houston, Andrau

12037N 13686E

alt. 79 RWY 16-34 4749 X 49

RWY 11-29 2997 X 49

Houston, Hooks Mem.

12176N 13717E alt. 151 RWY 17-35

RWY 17-35

11969N 13799F

alt. 46

RWY 4-22

RWY 13-31

RWY 17-35

RWY 13-31

Nudson (NDB) 13435N 13440E

12128N 13770E

Humble (VOR)

Nuntsville (NDB)

freq. 116.6

12485N 13721E freq. 308

freq.

248







HOUSTON - 7







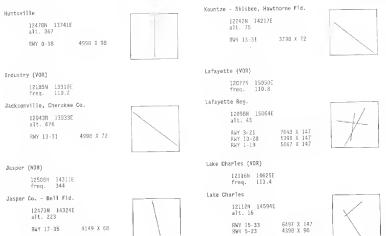
7599 X 147

7599 X 147

5999 X 147

5149 X 98





HOUSTON - 11

Lakeside (NDB) 12084N 13637E freq. 249

Lee Co. (NDB) 12301N 13166E

110.8

freq. 385 Leona (VOR)

12664N 13597E freg.

Lufkin (VOR) 12626N 14066E

freq. 112.1 Lufkin, Angelina Co.

> 12649N 14075E alt. 289 RWY 15-33

RWY 7-25

Mansfield (NDB) freq. 414

12984N 14466E

4513 X 98 4398 X 98

Natchez (VOR) 12696N 15364E

freq. 110

Mansfield, Desoto Parish

alt. 325

RWY 3-21

RWY 0-18

Nacogdoches (NDB)

12071N 14478E

12832N 14084E

freq. 391

Nacogdoches, East Texas Reg.

alt. 371

RWY 15-33

12795N 14105E

RWY 6-24

alt. 272

PWY 13-31

RWY 17-35



Natchez-Adams Co., Hardy-Anders Fld 12683N 15365E

5067 X 147

4198 X 147

3598 X 72

5067 X 72

5097 " 147 4498 % 147 Natchitoches (NDB) Palacios (VOR) 12810N 14698E 11654N 13341E freq. 407 freq. 117.3

Natchitoches

Navasota (VOR)

12 - HOUSTON

12798N 14707E alt. 118

RWY 16-34 RWY 7-25

12305N 13518E

4073 X 147

3998 X 147

freq. 115.9 New Iberia, Acadiana

12025N 15087E alt. 23 RWY 16-34 7999 X 196

Opelousas, St.Landry Parish

12257N 15026F alt. 72

RWY 17-35 4549 X 98 RWY 5-23 4047 X 98

Palacios 11643N 13384E alt. 16

RWY 13-31 RWY 17-35 Palestine (NDB)

12936N 13730E freq. 375 Palestine

RWY 8-26

4998 X 147

4998 X 147

4998 X 147

3998 X 72

3998 X 72

12924N 13750E alt. 423

RWY 8-26 RWY 17-35

Parish (NDB)

12392N 14567F

HOUSTON - 13

freq. 385

Pine (NDB)

12470N 14307F freq. 332

12544N 14626E

freq. 108.4

freq. 515

HOUSTON - 15

Port Lavaca, Calhoun Co.

11631N 13217E alt. 33 3998 X 72 RWY 14-32

13094N 13480E freq. 344

Powell (NDB)

Ouitman (VOR)

13458N 13876E 114 freq.

12874N 13187E

freq. 400

Robinson (NDB)

Redbard (NDB)

13415N 13314E freq. 287

freq.

Tomball (NDB) 12189N 13696E freq. 408 Victoria (VOR)

Macc (VOR)

Rockport (NDB)

Sabine Pass (VOR)

Scholes (YOR)

Scurry (VOR)

Temple (VOR)

11404N 130A4E

11954N 14250E

1184DN 13871E

freq. 112.8

13302N 13504E frea. 112.9

12763N 13043E

freq. 115.4

freq. 391

11746N 13091E

12955N 13122E

115.3 frec.

freq.

110.4

16 - HOUSTON

Yoakum (NDB)

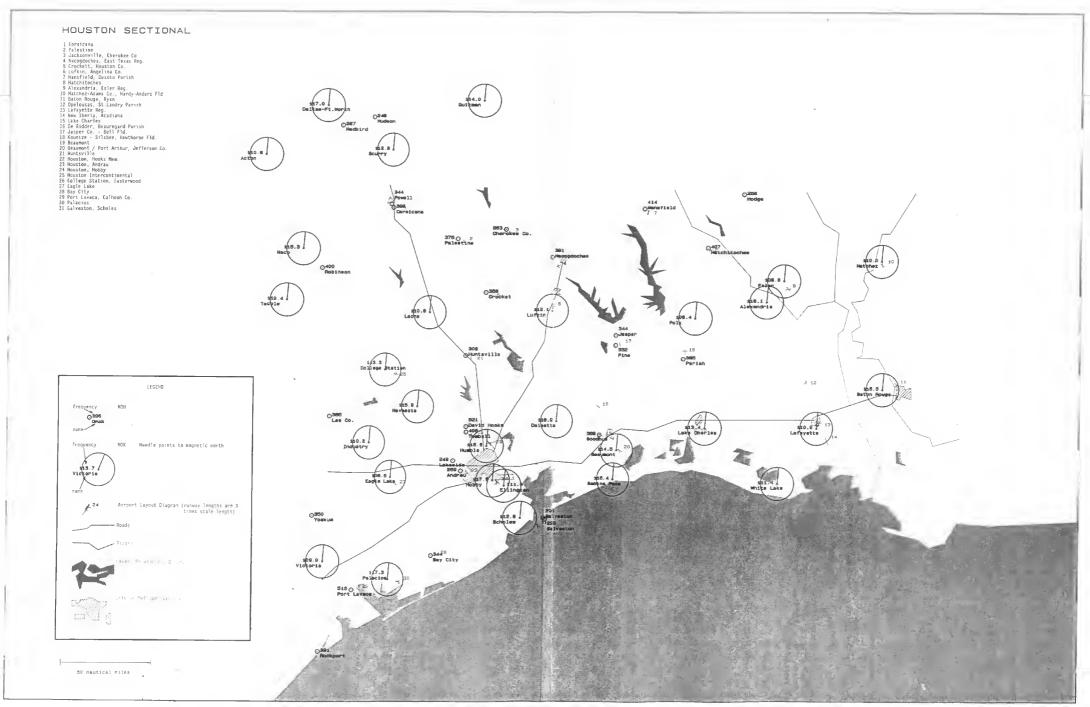
White Lake (VOR)

freq. 111.4

11926N 13065E

350

11878N 14881E



Abilene (VOR)

13431N 12205É freq. 113.7

Acton (VOR)

13330N 13014E

Alice (VOR)

11287N 12652E freq. 114 5

Austin (VOR)

12376N 12896E freq. 114.6

Austin, Mueller

12376N 12909E

PWV 13-31

7268 X 147 5005 X 147 RWY 17-35 3168 X 72 RWY 13-31



12937N 11554E

4027 4 49 RWY 16-3-



Big Spring (VDR) 13460N 11604E freq. 114.3

Brooks Co. (NDB)

11060N 12589E freq. 353

Brownsville (VOR)

10475N 12825F freq. 116.3

Brownsville/South Padre Island Int'l

10476N 12808F alt. 23 RWY 13-31 7399 X 147 RWY 17-35 5999 X 147

Center Point (VOR)

12281N 12306E freq. 117.5 Coleman (NDB) 13121N 12337F

Caprizo Springs, Dimmit Co.

alt. 620

11708N 12014E

RWY 12-30

5297 X 72

3798 X 72

freq. 385 Coleman

13111N 12349F

alt. 1696 RWY 15-33

Brownwood

Brownwood (VOR)

freq. 108.6 13069N 12508F

13125N 12506F

RWY 13-31

alt. 1387 RWY 17-35 RWY 12-30

5595 X 147 4598 X 98

2997 X 72

College Station (VOR)

12460N 13400E freq. 113.3

Conor (NDB)

11313N 12827F freq. 382

4998 X 72 3299 X 68

11338N 12882E freq. 115.5

Corpus Christi (VOR)

Corpus Christi

11283N 12854E alt. 43

RWY 13-31 7507 X 147 RWY 17-35

Cotulla (VOR)

11642N 12264F

freq. 115.8 Dallas-Ft.Worth (VOR)

13497N 13264E

freq. 117 Dimmit Co. (NDB)

Eagle Lake (VOR)

12045N 13385F freq. 108.6

6077 X 147

11703N 11999F freq. 343

Harlingen (VOR)

Falfurrias, Brooks Co.

11003N 12502E

RWY 17-35

RWY 14-32

freq. 326

12923N 10959E

freq. 112.8

12899N 11008E

Fort Stockton (VOR)

Fort Stackton-Pecas Co.

alt. 3011

RWY 12-30

Farley (NDB)

freq. 108.8

7498 X 98

8298 X 147

5949 X 147

5743 X 147

5254 X 147

6097 X 147

6097 X 147

5497 X 147

4696 X 147

10625N 12732E

12039N 12294F

12037N 12303E alt. 928 RWY 8-26

RWY 13-31

RWY 17-35

RWY 17-35

RWY 4-22

freq. 329

alt. 36

RWY 17-35

RWY 17-35

RWY 8-26

RWY 13-31

Honda (NDB)

Hyman (VOR)

Handa

Junction (VOR)

12603N freg.

12741N 12752E

Lampasas (VOR)

12782N 12774F freq. 112.5

Lampasas

alt. 1214 RWY 16-34

Laredo (VOR) 11234N 12100E frea. 117.4

Laredo Int'l

11263N 12098E alt. 508

RWY 17-35 RWY 17-35 RWY 14-32

RWY 9-27

SAN ANTONIO AND BROWNSVILLE - 7

8199 X 147 7809 X 147

5923 X 147

3808 X 59

5431 X 147

Laughlin (VOR)

12113N 11688E

freq. 114.4

frec. 110.2

freq. Industry (VOR) 12185N 13310E

13337N 11721F

110.4

Lee Co. (NDB) 12301N 13166E free. 385

Llano (VOR)

8 - SAN ANTONIO AND BROWNSVILLE

12641N 12513E 108.2

freq. McAllen (VOR) 10617N 12497E freq. 109.8

McAllen, Miller Intil 10621N 12503E

Midland (VOR) 13338N freg.

alt. 108 RWY 13-31 RWY 0-18

2984 X 59

McGregor 12871N 13097E

alt. 590

RWY 17-35

RWY 4-22 3778 X 55

5497 X 147

7107 X 147

Mineral Wells (NDB) 13497N 12883E

Millsap (VOR)

freq. 266 Mitchell (NDB) 10449N 12824E

13458N 12902F

freq. 117.7

freq. 375 Monahans, Hurd Mem. 13180N 11C54E alt. 2614

RWY 12-30 RWY 1-19

Navy Corpus (VOR)

freq. 212

11239N 12931E

frea. 114

12136N 12740F

New Braunfels (NDB)

4267 X 72

2929 X 72

RWY 17-35

RWY 4-22

RWY 13-31

freq. 410

freq. 515

freq. 112.3

13355N 12592E

11654N 1334IE

freq. 117.3 Port Lavaca (NDB)

11628N 13191F

12065N 12638E

12943N 11536E

13415N 13314E

freg. 287

341 freq.

Old Rip (NOB)

Palacios (VOR)

Randolf (VOR)

Reagan (NDB)

Redbird (NDB)

10 - SAN ANTONIO AND BROWNSVILLE

5369 X 147

5349 X 147

5359 X 98

Rockport (NDB)

11404N 13044E freg. 391

alt. 26

RWY 14-32

RWY 8-26

RWY 17-35

12372N 11903E

12970N 11923F

freq. 115.1

12958N 11926E

alt. 1916

RWY 0-18

RWY 3-21

RWY 9-27

Rocksprings (YOR)

San Angelo (VOR)

San Angelo, Mathis

Robinson (NDB)

12874N 13187E

400 freg.

Rockport, Arkansas Co. 11402N 13046E

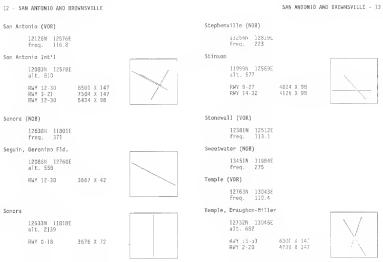
> 5598 X 147 4496 X 147 4496 X 147

6917 X 147

5936 X 147

4398 X 72

freq. 111.2



Tuscola (VOR)

freq. 111.4

13322N 12211E

freq. 111.5 Uvalde (NDB)

11982N 12073E freq. 281

14 - SAN ANTONIO AND BROWNSVILLE

Uvalde, Garner

12000M 12084E alt. 941

RWY 15-33

Victoria (VOR)

11746N 13091E

freq. 109

Waco (VOR)

12955N 13122E freq. 115.3

5247 X 98

Yoakum (NDB)

Waco - Madison Cooper

alt. 515

RWY 1-19

11926N 13065E

12922N 13134E

RWY 14-32

RWY 5-23

freq. 350



11930N 13064E alt. 367

RWY 13-31 3447 X 59



6596 X 147

5897 X 147

5497 X 147





SAN ANTONIO AND BROWNSVILLE - 15











ALBUQUERQUE AND EL PASO - 1

Alamagordo - White Sands 13805N 19097E

alt. 4198



Albuquerque (VOR)

14796N 9905E freq. 113.2

Albuquerque Int'l 14782N 9979E

alt. 5353 RWY 8-26

RWY 3-21 RWY 12-30 Albuquerque, Alameda



7002 X 147

e, Alameu

14847N 9971E alt. 5097

alt. 5097 RWY 17-35 6077 X 78 RWY 10-28 4247 X 59



ALBUOUERQUE AND EL PASO Albuquerque, Coronado 14841N 10003E

alt. 5281

RWY 17-35

RWY 3-2I



Artesia

13716N 10568E alt. 3549 RWY 12-30 5398 X 147 RWY 3-21 6297 X 147 RWY 8-26 6799 X 147



ALBUOUEROUE AND EL PASO - 3

Albuquerque, Double Eagle II 14836N 9919F alt. 5835

> RWY 4-22 7399 Y 98

4017 X 59

3499 X 39

alt. 5182 RWY 3-21

14629N 9867E

12645N 10682F

Belen, Alexander

12628N 10661F

Alpine

alt. 4513 RWY 1-19 5999 X 72 RWY 5-23 4821 X 39



freq. 201 Caprizozo 14142N 10116E

Brewster Co. (NDB)

4897 X 72

4798 X 59

Anton Chico (VOR)

14710N 10537F

freq. 110 Artesia (NDB) freo.

13703N 10575E

414

Carlsbad (VOR)

alt. 5369

RWY 6-24

13429N 10622F freq. 116.3



Corona (VOR)

Dalhart (VOR)

alt. 4215

RWY 4-22

RwY 12-30

freq. 115.5

14991N 11484F freq. 112

Carlsbad, Cavern City

RWY 3-21 RWY 14 32

RWY 8 26 RWY 14-32

13484N 10608E alt. 3293











El Paso Int'l

alt. 3956 RWY 4-22

RWY 8 26

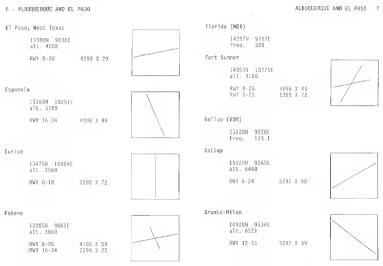
RWY 8-26



9006 X 147

5490 X 72





ALBUQUERQUE AND EL PASO - 9

Jal 13810N 9577F 13334N 10094E alt. 4146 alt. 3116 RWY 1-19 RWY 11-29 2929 X 42 3598 X 59

Hobbs (VOR) 13537N 10997F

7396 X 147

5999 X 147

4995 X 147

3509 X 147

Las Cruces (NDB)

13619N 9638E



RWY 9-27



2597 X 49



RWY 3-21 RWY 12-30 RWY 17-35 RWY 8-26

Hobbs, Lea Co.

Holloman (VOR) 13859N 9982E

freq. 108.2 Hudspeth (VOR)

13573N 11006E

alt. 3660

13248N 10133E freq. 115

Isleta (NDB) 14758N 9967E freq. 230

RWY 12-30 RWY 8-25 Las Vegas (NM) (VOR)

RWY 4-22

14952N 10547E freq. 117.3

Las Vegas, NM

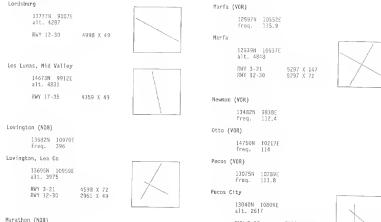
RWY 14-32

14949N 10536E alt. 6865

RWY 2 20

12531N 10816F

freq. 388



PWY 9-27

RWY 13-31

RWY D-18

7199 X 147

3749 X 147







Roswell (VDR)

13919N 10556E

freq. 116.1

RWY 17-35 4496 X 72 Salt Flat (VOR)

13303N 10255E freq. 113

14960N 10209E

freq.

110.6

14993N 10203E

alt, 6344

Santa Fe Co.

Silver City (VOR)

Socorro (VOR)

Silver City - Grant Co

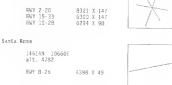
13862N 9218F

freq. 111.B

13870N 9229E alt. 5442 RWY 8-26

14493N 9845E

freq. 116.8



6799 X 98





14608N 8939F

14704N 9018E freq. 112.3

freq. 274





Texico (VOR)

Topan (NDB)

Socorro

RWY 5-23 RWY 12-30

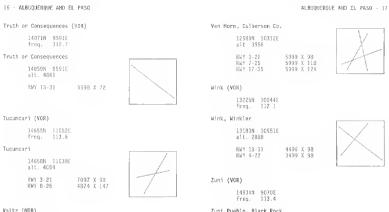
14317N 11276E freq. 112.2

13921N 10621F

freq. 305

2997 X 72

2387 Y 49



14953N 9223E

RWY 7-25

4798 X 49

alt. 6455



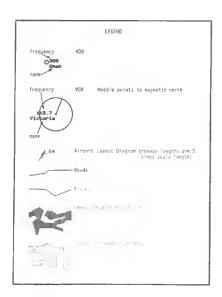
13446N 9814E

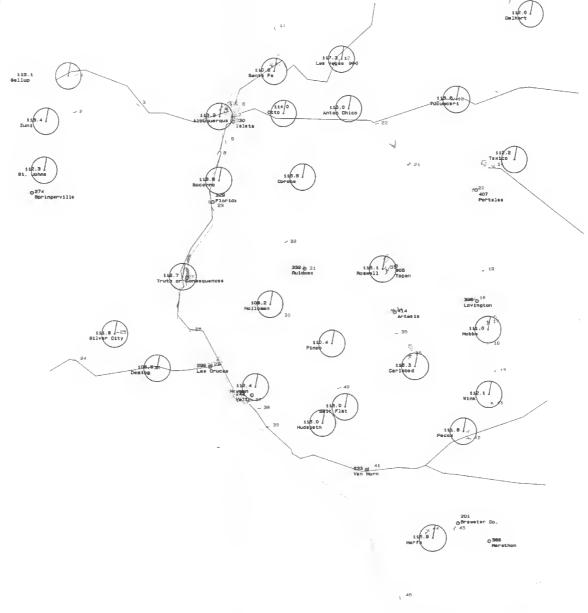
freq. 242

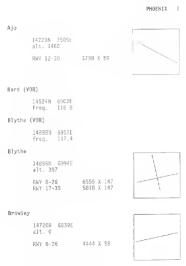
Van Horn (NDB)

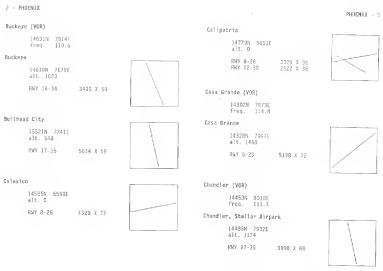
12985N 10304E freq. 233

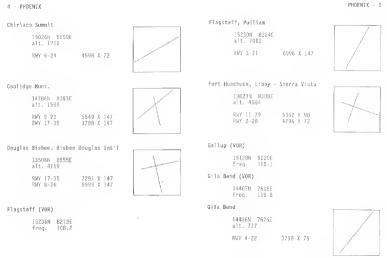


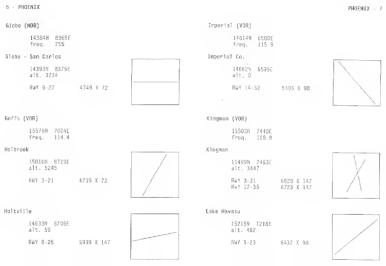


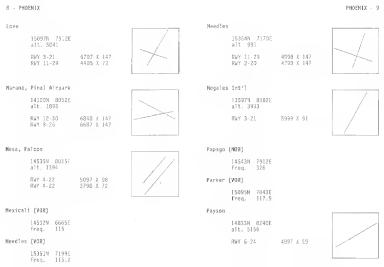


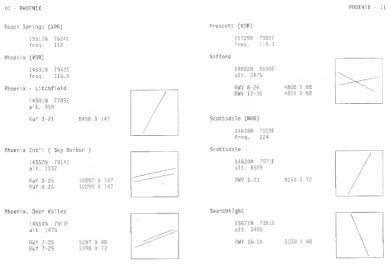


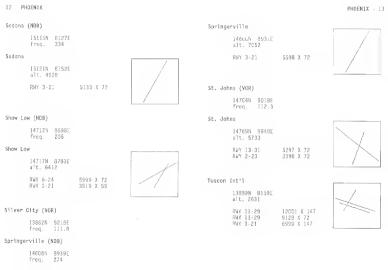


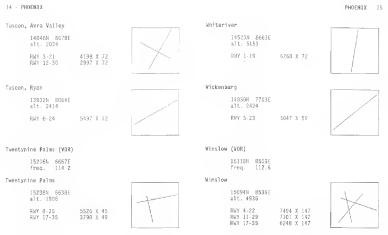












16 - PHOENIX

Yuma Int'l

14471N 6916E alt. 213 RWY 3-21 1329

RWY 3-21 13297 X 19 RWY 3-21 9236 x 147 RWY 8-25 6143 X 147 RWY 17-35 5707 X 147

RwY 8-25 6143 X RWY 17-35 5707 X Zuni (VOR)



14934N 9070E freq. 113.4

PHOENIX SECTIONAL

Searchipht

Sellhead City

Bellhead City

Needles

Kingman

Slake Blavasu

Slowe

Slowe

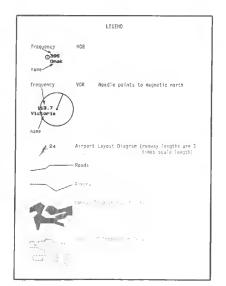
Slowe

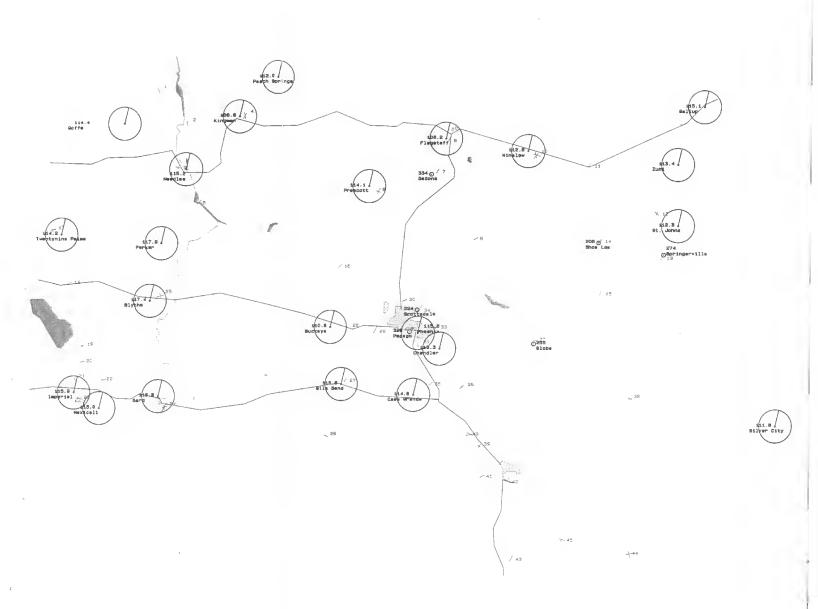
Slowe

Shigatff, Pulliam

Spring

Shiteriver





15382N 5791E alt. 3168 RWY 15-34

5628 X 49



Beaver

Austin

16548N 8314E alt. 5852

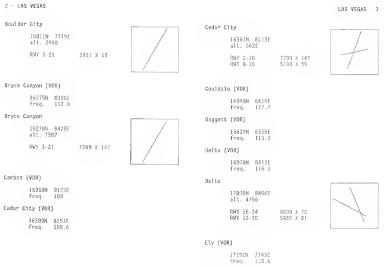
RWY 13-31

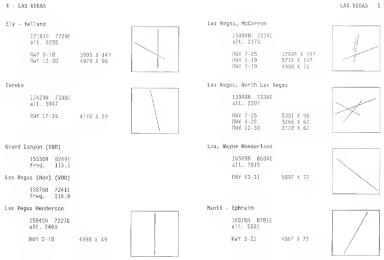
4496 X 72

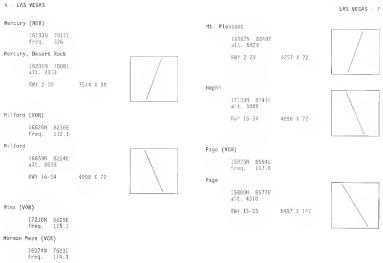
LAS VEGAS - 1

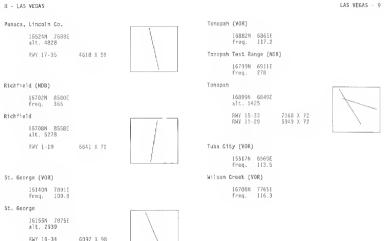
Boulder City (VOR)

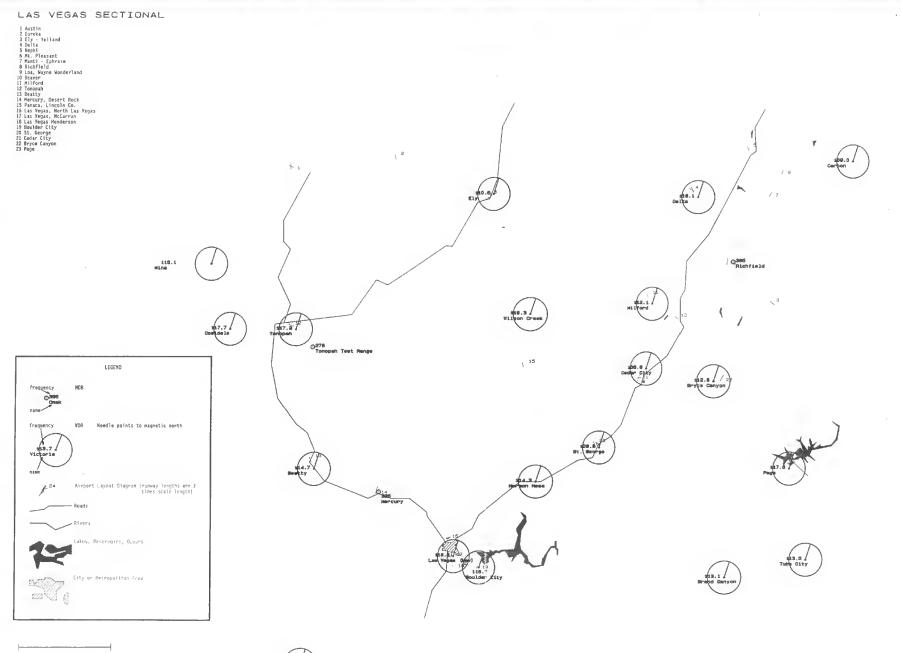
15808N 7328E freq. 116.7











Apple Valley 15522N 6307F alt. 3060 PWV 0-18 6497 X 147 Avenal (VOR) 16234N 5480E freg. 117.1 Bakersfield (VOR) 16079N S758F



frea. 115.4 16053N 5767E

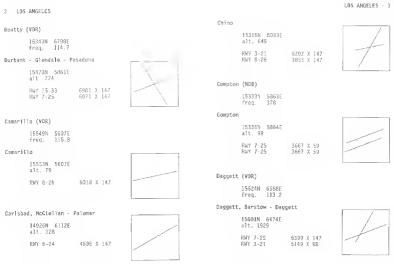
alt. 489

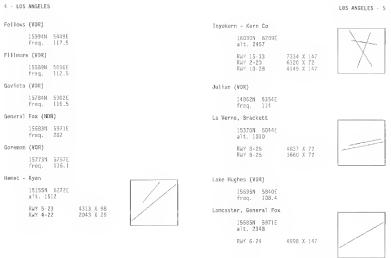
RWY 12-30 6707 X 147

RWY 12-30 3699 X 72

Banning

15214N 6349E alt. 2221 RWY 8-26 5198 X 147





Mojave Long Beach 15810N 6033E 15296N 5885E alt. 56 alt. 2788

RWY 7-25 5917 X 59 RWY 7-25 6189 X 196 RWY 7-25 5418 X 147 RWY 4-22 5198 X 49 RWY 16-34 5021 X 147 RWY 16-34 Nan Nuvs (VOR) 15497N 5816F freq. 113.1

Los Angeles Int'l

9997 X 196

15379N 5811E alt. 125 RWY 7-25 RWY 7-25 11998 X 196 RWY 6-24 10282 X 147

RWY 6-24 8924 X 147 15184N 6215E

freq. 113.4

March (VOR) Mission Bay (VOR)

RWY 8-26 RWY 3-21 0xnard

15563N 5567E

RWY 12-30

14983N 5074E

freq. 115.3

15343N 6106E

alt. 951

RWY 8-26

alt. 43 RWY 7-25

Oceanside (VOR)

Ontario Int'l

5949 X 98

10197 X 147

10000 X 147

9597 X 196

4749 X 147























LOS ANGELES - 7



6 - LOS ANGELES

RWY 12-30

14774N 6089E freq. 117.8

Palm Springs (VOR)

R - LOS ANGELES

Palm Springs

15153N 6489E freq. 115.5

11998 X 147

15143N 6459E alt. 449 RWY 12-30 7012 X 147

15624N 6010E freq. 114.5 Palmdale AF

15628N 6003E alt. 2542

RWY 7-25 RWY 4-22

Paradise (VOR)

freq. 112.2

15276N 6112E

Paso Robles (VOR)

16308N 5266E

freq. 114.3

Palmdale (VOR)

Pomona (VOR) 15367N 5041E

Pettis (NDB)

Poggi (VOR)

Priest (VOR)

Rialto

freq. 110.4 Porterville (VOR)

15318N 6187F

14679N 6157E

freq. 109.8

frea. 397

16520N 5389E

15352N 6185F alt. 1437 RWY 6-24

15280N 6141E

freq. 112.4

RWY 17-35

Riverside (VOR)

freq. 110

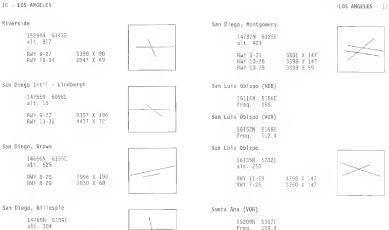
16249N 5836E

freq. 109.2

3598 X 72

1531 X 59

LOS ANGFLES - 9





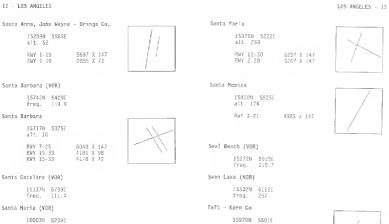
RWY 9-27

RWY 17-35

RWY 9-27

5339 X 98

4145 X 98 2735 X 59

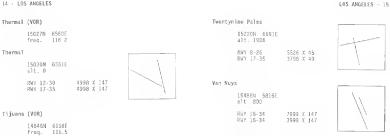


Santa Catalina (VOR) Santa Maria (VOR) freq. 111 alt. 876

RWY 7-25

RWY 2-20

3968 X 59





Twentynine Palms (VOR) 15194N 6745E freq. 114.2

Torrance

4998 X 147 2997 X 72

Ventura (VOR)

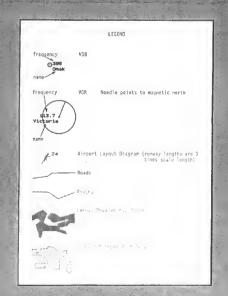
Visalia (VOR)

15507N 5609E freg.

16468N 5815E freq. 109.4

108.2

LOS ANGELES SECTIONAL I san tark Chipp 2 santa Kuchip 3 laft - Kers de 3 laft - Kers de 4 kouler 5 kouler 6 kouler 6 kouler 7 happett, Barston - Daggett 8 Apple Valley 10 salantial Reveral, for 10 salantial Reveral, for 11 santa Barbara 12 casartillo 13 forcare 14 forcare 15 larbana - Stendillo 15 forcare 15 larbana - Stendillo 15 forcare 16 la Verne, Brackett 17 Dotarro Intil 16 Rights 17 Later of the Stendillo 18 larbana - Stendillo 19 Chima 10 Standa Monica 20 Los Angoles Intil 21 correace 22 Los Angoles Intil 23 correace 25 Los Bendillo 26 Los Bendillo 27 Standa Monica 21 Los Angoles Intil 27 Correace 28 Los Angoles Intil 28 Los Angoles Intil 29 Lorenzo 20 Los Angoles Intil 20 Los Angoles Intil 20 Los Angoles Intil 21 Los Angoles Intil 22 Los Angoles Intil 23 Los Angoles Intil 24 Los Angoles Intil 25 Los Disposition (Richards 25 Los Disposition (Richards 25 Los Disposition (Richards 26 Los Angoles Intil 26 Los Angoles 27 Los Angoles 28 Los Angoles 29 Los Angoles 20 Los Angoles 21 Los Angoles 22 Los Angoles 23 Los Angoles 24 Los Angoles 25 Los Angoles 26 Los Angoles 27 Los Angoles 28 Los Angoles 29 Los Angoles 20 Los Angoles 20 Los Angoles 20 Los Angoles 20 Los Angoles 21 Los Angoles 21 Los Angoles 22 Los Angoles 23 Los Angoles 24 Los Angoles 25 Los Angoles 26 Los Angoles 27 Los Angoles 28 Los Angoles 28 Los Angoles 28 Los Angoles 29 Los Angoles 20 Los Angoles 21 Los Angoles 21 Los Angoles 22 Los Angoles 23 Los Angoles 24 Los Angoles 25 Los Angoles 26 Los Angoles 27 Los Angoles 28 Los Angoles 28 Los Angoles 28 Los Angoles 29 Los Angoles 20 Los Angoles 21 Los Angoles 22 Los Angoles 23 Los Angoles 24 Los Angoles 25 Los Angoles 26 Los Angoles 27 Los Angoles 28 Los Angoles 28 Los Angoles





Big Sur (YOR)

16658N 5071E freq. 114

Bishop (VOR)

freq. 109.6

Casa Diablo (NDB)

16854N 6298E freo. 260

Chandler (NDB)

16661N 5751E

freq. 344

Chico (YOR)

18158N 5573E freg. 109.8

Chico

18158N 5567F alt. 239

RWY 13-31 6723 X 147 RWY 13-31 3004 X 59

Columbia (NDS)

17267N 5759E freq. 404



2 - SAN FRANCISCO

SAN FRANCISCO - 3





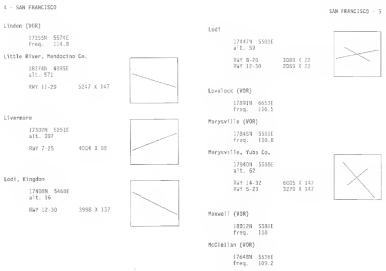


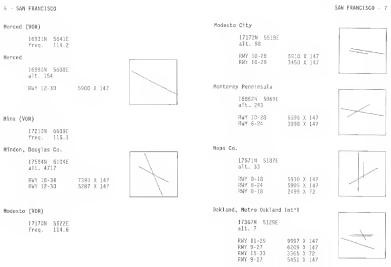
16722N 5786E freq. 112.9	17590N 5755E freq. 115.5
resno - Chandler Downtown	Hazen (VOR)
16671N 5752E	17712N 6434E

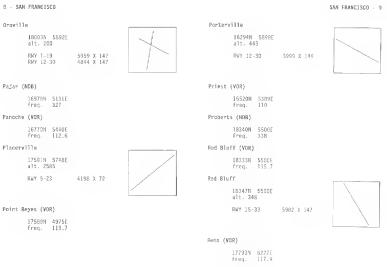
Fresno - Chandler Downtown		
16671N 5752E alt. 279	17712N 6434E freq. 114.1	
	Lake Tahoe (VOR)	

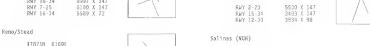
alt. 279			
RWY 12-30	3473 X 72		Lake Tahoe (VOR)
RWY 12-30	3440 X 72	1	1772AN 5070F

freq. 113.2















Sacramento Metro				
17681N 5477E		San Francisco Int'l		
alt. 23		1734CN 5061E		
RWY 16-34 8596 X 147		alt. 10		\
KH1 10-34 6390 X 147		RWY 9-27	5339 X 98	
	\ \	RWY 9-27	2735 X 59	1

RWY 17-35

4145 X 98

San Jose, Reid - Hillview 17158N 5194E

RWY 13-31 3099 X 72 RWY 13-31 3096 X 72

> 17184N 5165E alt. 56

RWY 12-30

RWY 12-30

RWY 11-29

Santa Rosa (VOR) 17758N 5064E

alt. 134

San Jose

8898 X 147

4418 X 147 2997 X 39

Santa Rosa, Sonoma Co.

17756N 5066E alt. 125 RWY 14-32 RWY 1-19

freg. 113

5113 X 147

5001 X 147

RWY 16-34

Sausalito (VOR)

Santa Rosa

alt. 98

17711N 5066E

6887 X 196

8541 X 147

17452N 5050F freq. 116.2

Scaggs Island (VOR) 17567N 5149E

freq. 112.1 South Lake Tahoe, Lake Tahoe

17570N 6016E alt. 6265

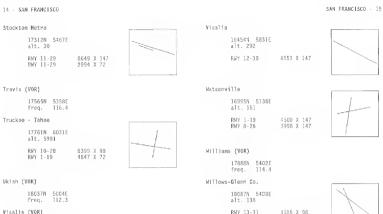
RwY 0-18

Sparks (NDB)

17875N 6213E frec.

Stockton (VOR)

17276N 5483E frea.



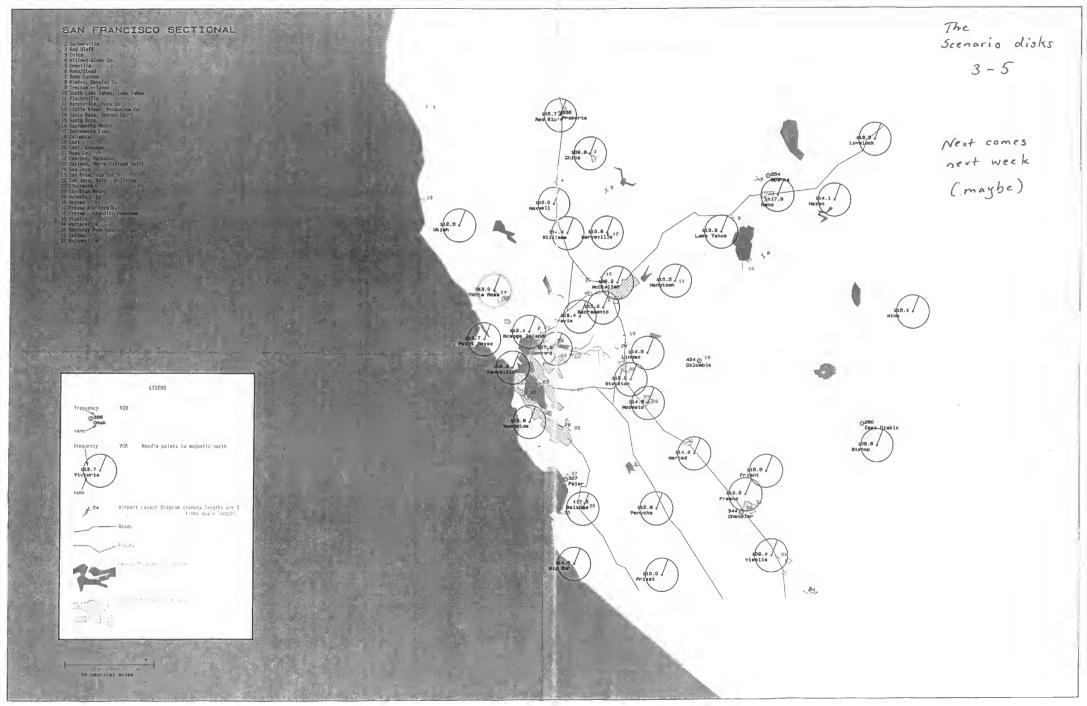
RWY 16-34

Woodside (VOR) 17233N 5054E freq. 113.9 4503 X 147

Visalia (VOR)

16468N 5815E

freq. 109.4



Amsterdam (NDB)

freq. 329 Anaconda

19941N 9104F alt. 5032

19644N 9581E

RWY 4-22 4496 X 59

Beaverhead (NDB)

19546N 9114E freq. 379

Big Timber

19588N 9909E alt 4480

RWY 6-24

Billings (VOR)

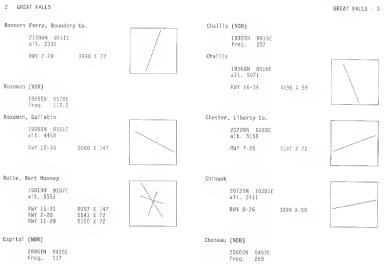
19492N 10339E

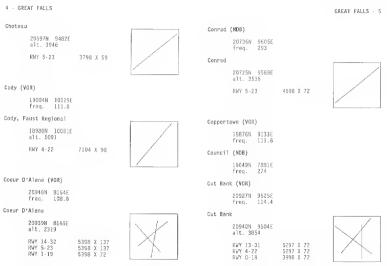
freg. 114.5

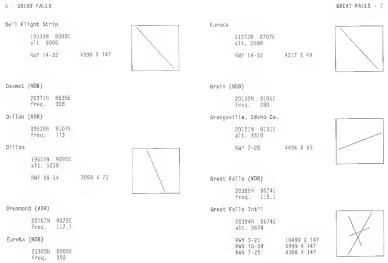
Blackfoot (NDB)

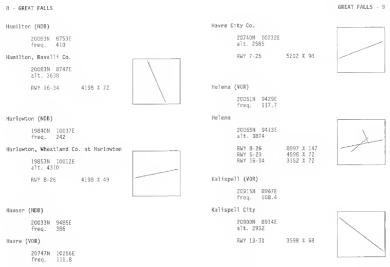
20925N 9521E freg. 260

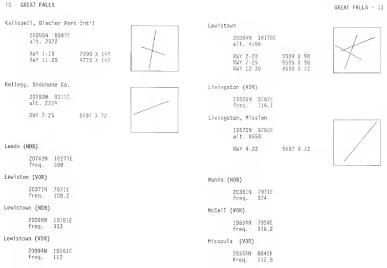
4647 X 72

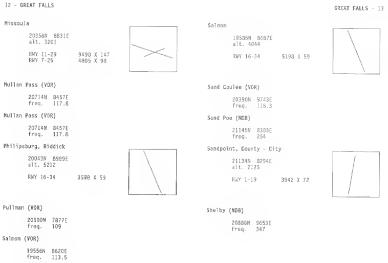


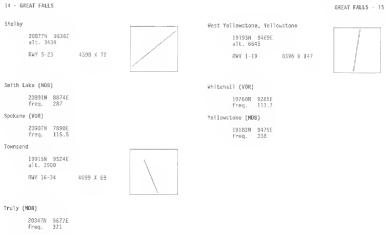


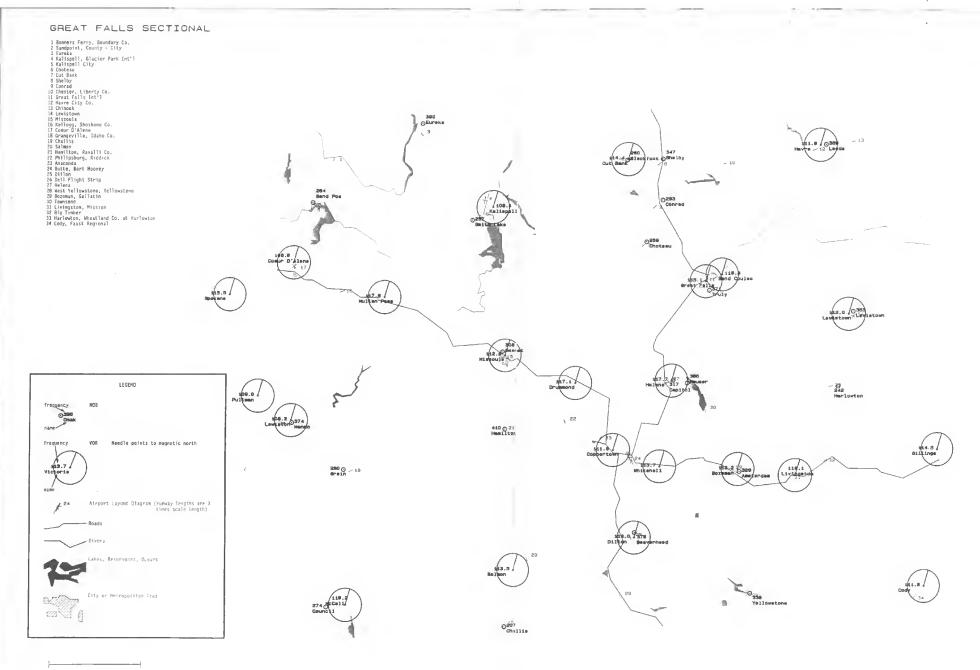












KLAMATH FALLS - 1

18912N 5055E freq. 233 Alkali Lake State

> 19309N 6624E alt. 4313 RWY 17-35

Abeta (NDB)

Alturas (NDB)

18716N 6231F freq. 215

Alturas

alt. 4376

18923N 5058E freq. 110.2

18711N 6223E

6149 X 147

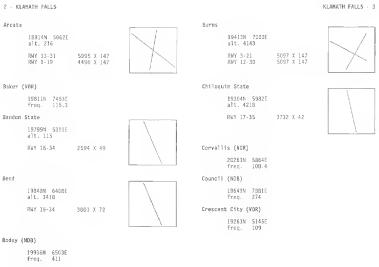
RWY 13-31 4296 X 49 RWY 3-21

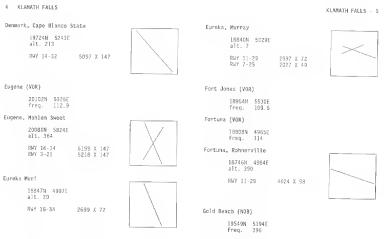
Arcata (VOR)

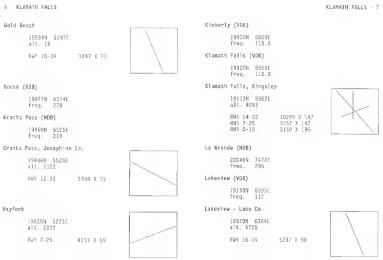
3457 X 59

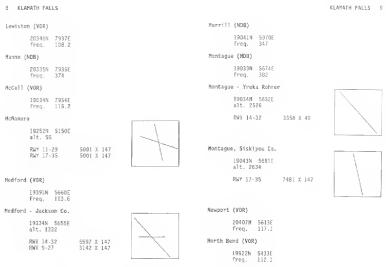


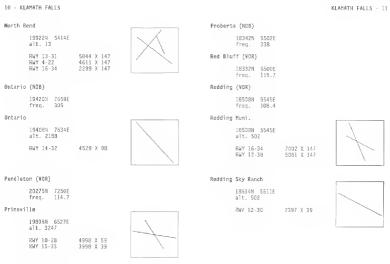


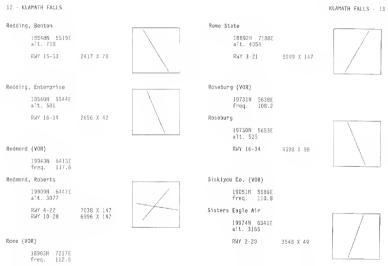




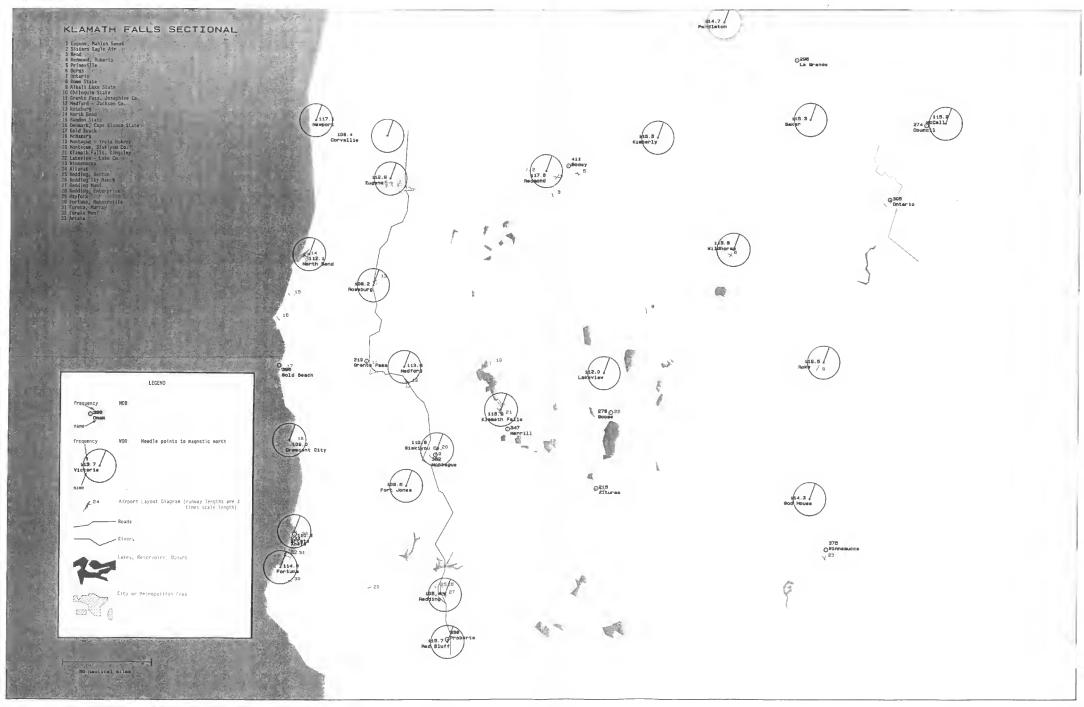








14 - KLAMATH FALLS Sod House (VOR) 18421N 7010E freq. 114.3 Walla Walla (VOR) 20367N 7490E freq. 116.4 Wildhorse (VOR) 19427N 7018E freq. 113.8 Winnemucca (NDB) 18215N 7013E freq. 375 Winnemucca 18187N 6997F alt. 4303 RWY 2-20 4998 X 147 RWY 14-32 4998 X 147



SEATTLE - 1

Arlington 21619N 6744E alt. 138

RWY 16-34 5329 Y 98 RWY 11-29 2797 X 72

Astoria (VOR)

21017N 5941E freq. 114

Astoria, Port of Astoria

21009N 5937F alt. 10

> RWY 8-26 RWY 13-31 RWY 3-21

Baker (VOR)

19811N 7453E freq. 115,3

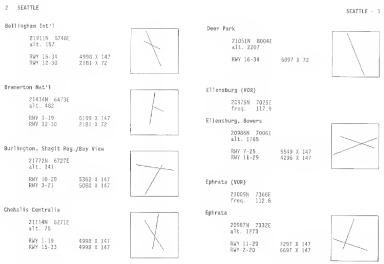
Bellingham (YOR)

21979N 6763E freq. 113

5795 X 147

5057 X 196 3981 X 196





Everett, Snohomish Co Kitsap (NDB) 21532N 6670E 21415N 6474E alt. 604 Freq. 206 RWY 15-34 9006 X 147 La Grande (NDB) RWY 11-29 4946 X 72 RWY 3-21 3726 X 147 20046N 7472E

Felts 20927N 7989E alt. 1952 RWY 3-21 4496 X 147 3056 X 72 RWY 3-21

Lewiston (VOR) 20346N 7937E freq. 108.2 Lewiston - Nez Perce

freq. 296

20601N 6227E

freq. 332

Laker (NDB)

20358N 7894E alt. 1437 RWY 8-26 RWY 11-29



Kelso (NDB) 20899N 6207E freq. 256 Kelso - Longview

Hoguiam (VOR)

21362N 6002E

freq. 117.7

20882N 6202E

4391 X 98

alt. 16

RWY 11-29

4 - SEATTLE

Manno (NDB)

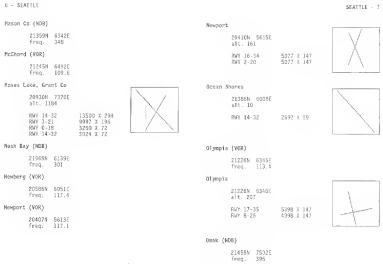
20335N 7935E freq. 374

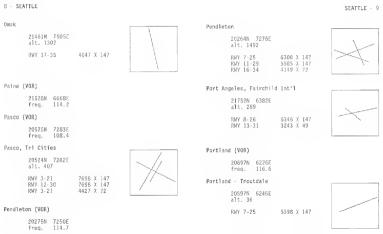
Lummi (NDB)

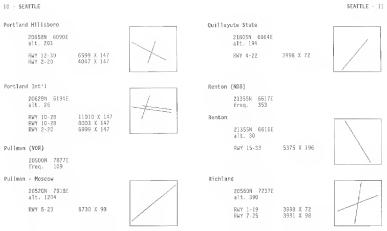
21913N 6748F

freq. 385

SEATTLE - 5







SEATTLE - 13 Salem, McNary Shelton, Sanderson 20413N 5967E 21361N 6320E alt. 210

12 - SEATTLE



Seattle (VOR) Spokane (VOR) 21343N 6584E 20907N 789CE freq. 116.8 freq. 115.5 Seattle - Tacoma, Henry M. Jackson Spokane Int'l

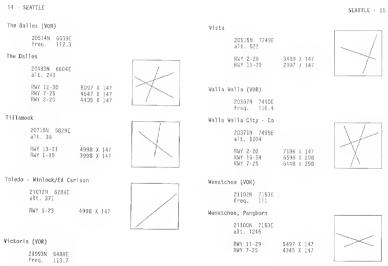
21349N 6584E 20923N 7924E alt. 430 alt. 2371 RWY 16-34 11899 X 147 RWY 3-21 8997 X 147

RWY 16-34 9423 X 147 RWY 7-25 8196 X 147

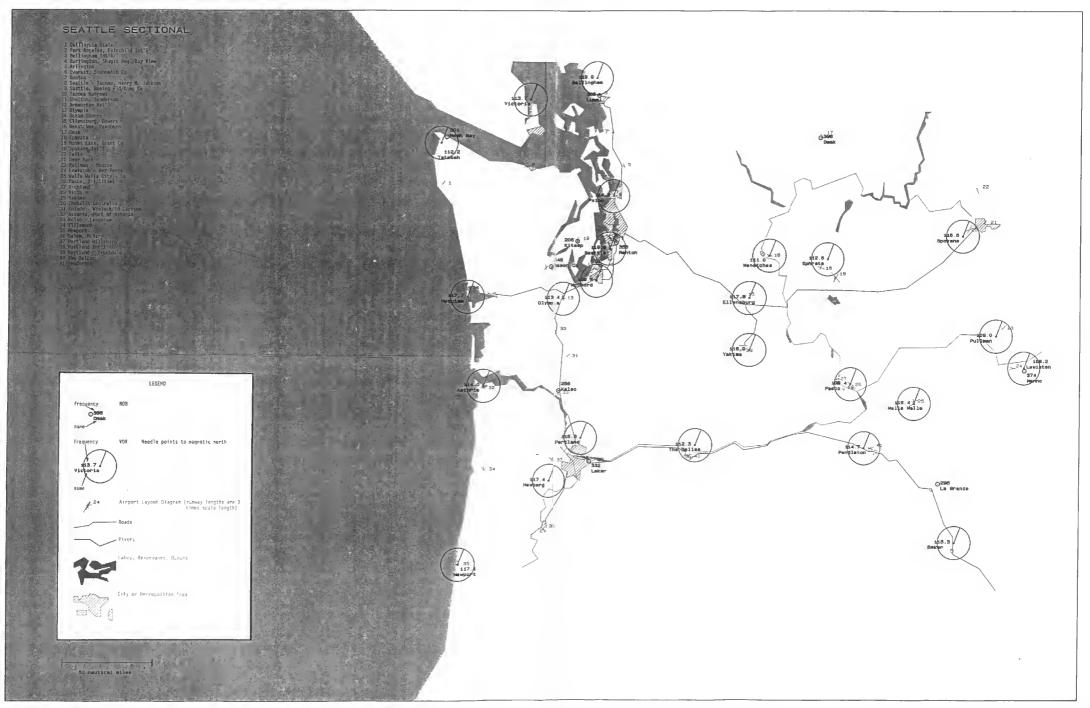
Seattle, Boeing Fld/King Co		Tacoma Narrows	_	
21379N 6599E alt. 16		21310N 6482E alt. 292		
	00 X 196 9 X 98	RWY 17-35 5	001 X 147	

RWY 13-31 RWY 13-31	10000 X 196 3709 X 98	alt. 292 RWY 17-35	5001 X 147	
		Tatoosh (VOR)		

21955N 6111E freq. 112.2



16 - SEATTLE Yakima (VOR) 20787N 6957E freq. 116 Yakima 20796N 6928E alt. 1096 RWY 9-27 7599 X 147 RWY 4-22 4290 X 147



Akron (VOR) 16767N 11508E

Alliance (VOR)

17564N 11750E freq 111.8

Alliance

17564N 11750E alt. 3929 RWY 12-30 RWY 8-25

RWY 17-35 6310 X 72 Antelope (NDB)

17731N 9745E freq. 290 Antioch (NDB)

> 17544N 11759E freq. 287

Boysen Reservoir (YOR)

18473N 10132E

freg. 117.8 Casper (VOR)

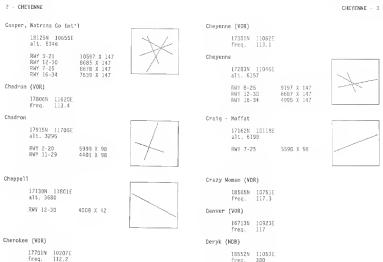
> IR190N 10728E freq. 116.2

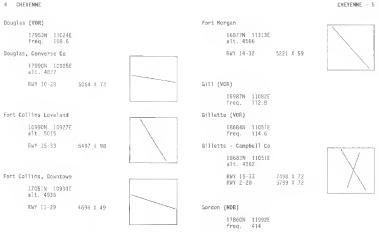
9200 X 147 6340 X 147

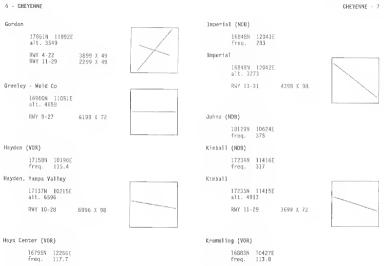


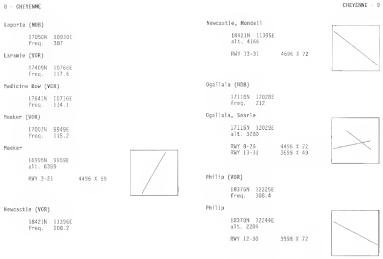


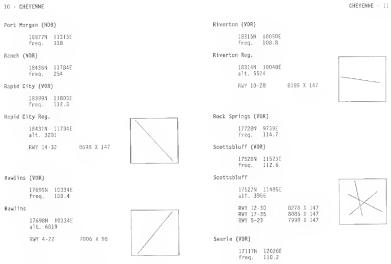


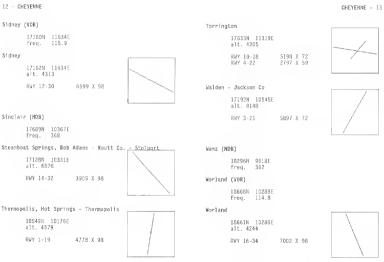


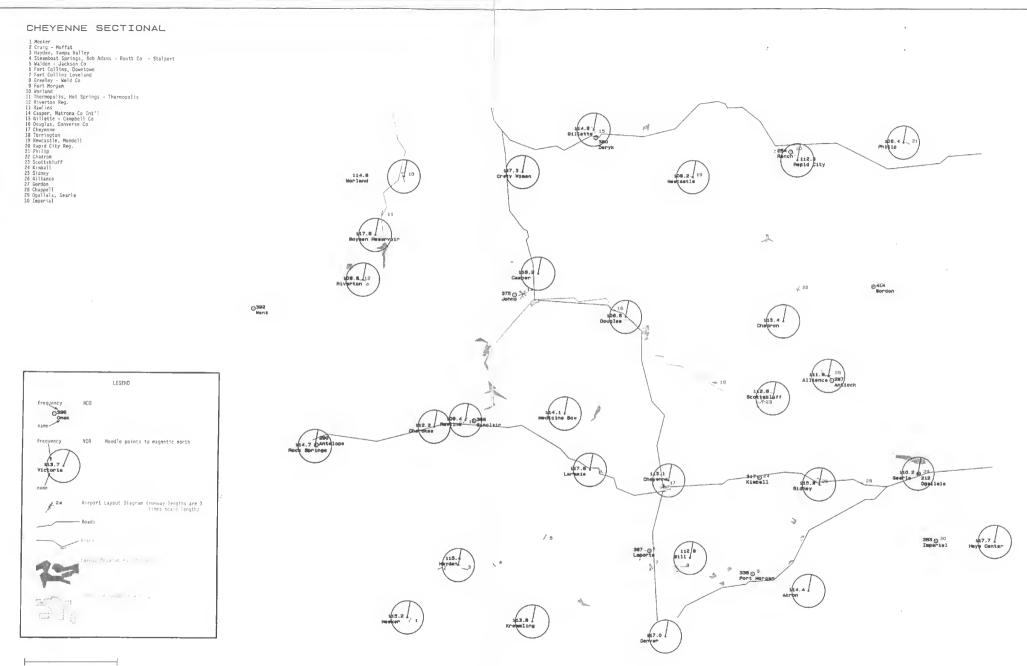












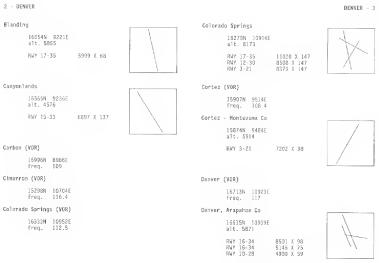
Alamosa (VOR) 15716N 10442E freq. 113.9 Alamosa - Bergman 15761N 10434E alt. 7534 RWY 2-20 8498 X 98 Aspen - Pitkin Co. Sardy Fld. 16576N 10225E

DENVER - 1

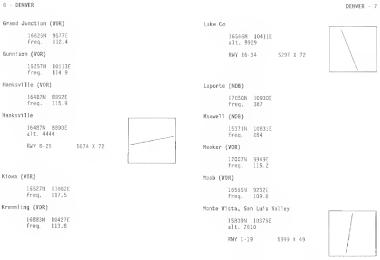


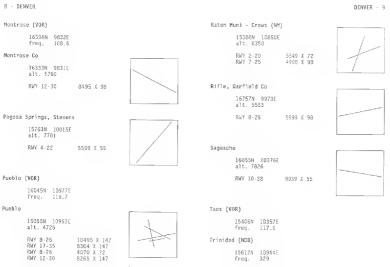




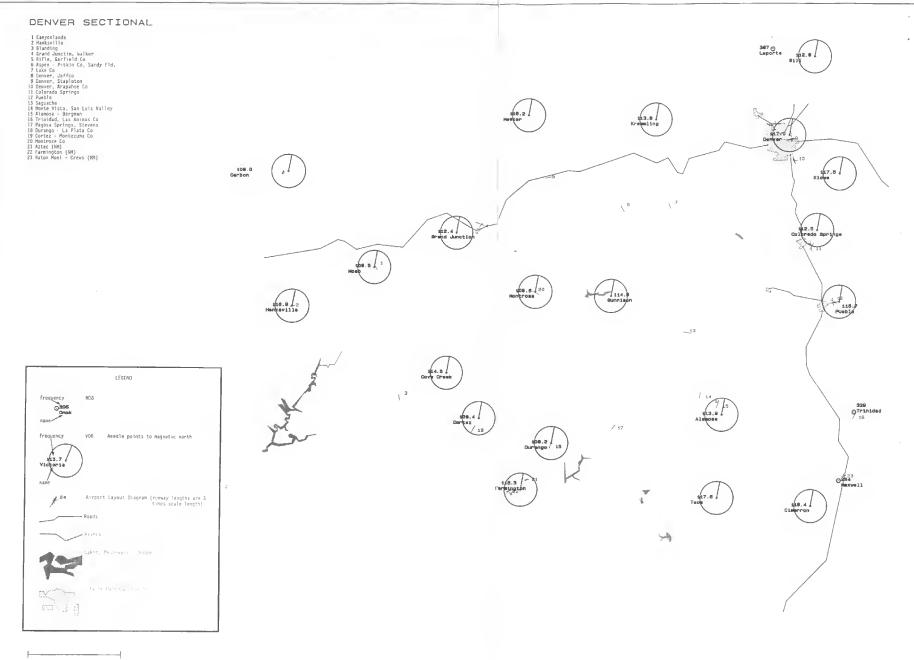


DENVER - 5 4 - DENVER Durango - La Plata Co Denver, Jeffco 15752N 9766E 16768N 10856E alt. 6685 alt. 5655 RWY 2-20 9197 X 147 RWY 11-29 7494 X 98 RWY 2-20 3598 X 72 3998 X 59 RWY 11-29 Farmington (NM) Denver, Stapleton 15609N 9571E 16704N 10926E alt. 5504 alt. 5333 RWY 7-25 6701 X 98 RWY 17-35 11998 X 196 RWY 5-23 6500 X 147 RWY 17-35 11499 X 147 RWY 8-26 10003 X 147 RWY 8-26 7924 X 147 4860 X 72 RWY 7-25 Farmington (VOR) 15603N 9618E freq. 115.3 Gill (VOR) Dove Creek (VOR) 16987N 11082E 16105N 9426E freg. 112.8 freq 114.6 Grand Junctin, Walker Durango (VOR) 16637N 9671E 15753N 9770F alt. 4858 freq. 108.2 RWY 11-29 10499 X 147 5362 X 98 RWY 4-22









SALT LAKE CITY - 1

Freq. 290 Battle Mountain (VOR) 18047M 7135F freq. 112.2 Bear Lake (NDB) 18196N 9086E freq. 233 Big Piney (VOR) 18234N 9503E freq. 115 5 Big Piney 18233N 9507F

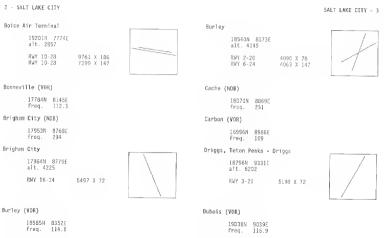
Boise (VOR)

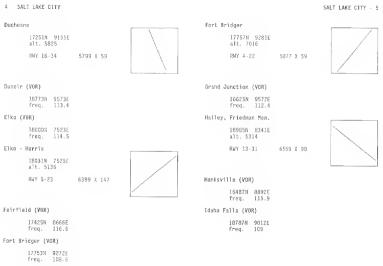
Antelope (NDB) 17731N 9745E

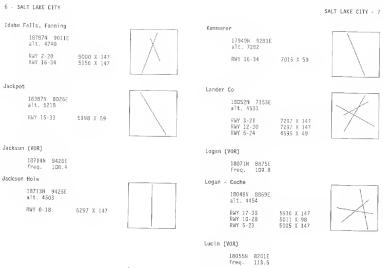
> 19203N 7768E freq. 113.3

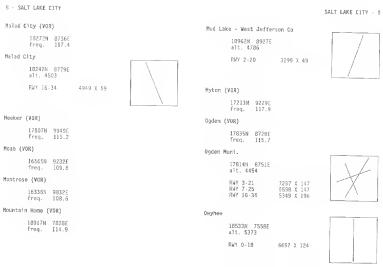
alt. 6973 RWY 12-30

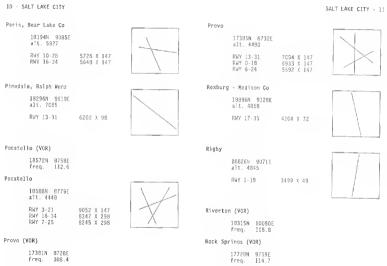
4496 X 72

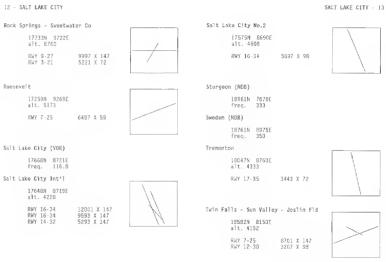


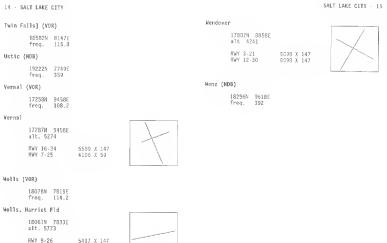


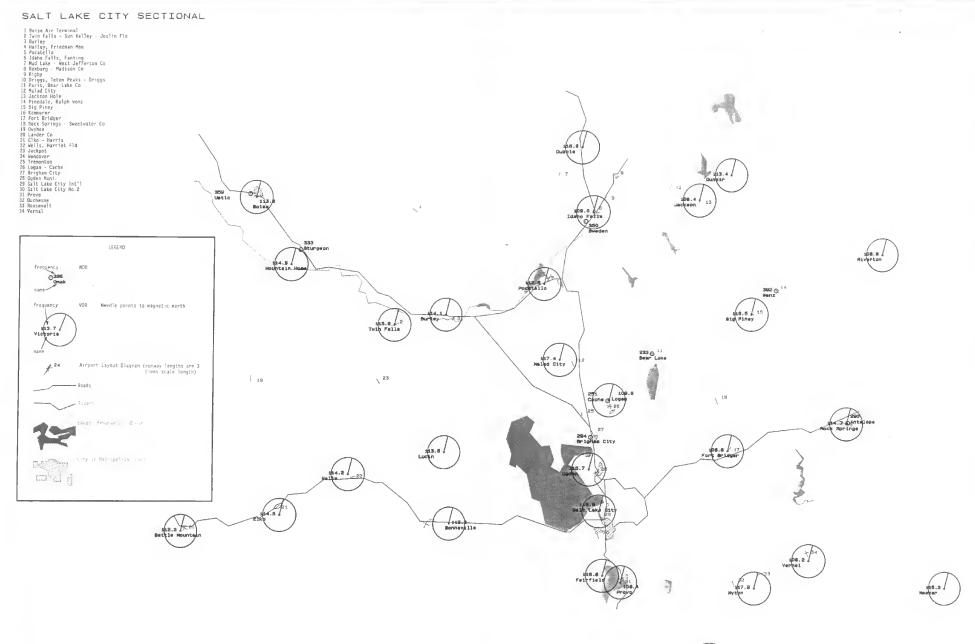












alt. 1302 RWY 13-31 3598 X 49

Bartlesville (VOR) 15055N 13699E

freq. 117.9 Beatrice (VOR)

16641N 13597E freq. 110.6 Bilmart (NDB)

> 15034N 14859E freq. 341

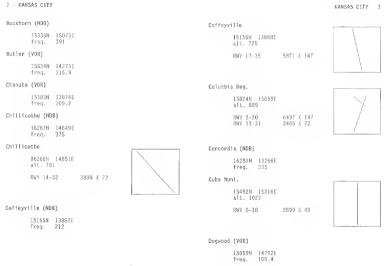
Brookfield (NDB)

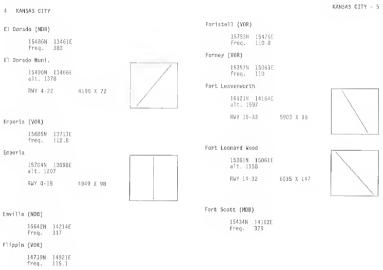
16249N 14780F freq. 383

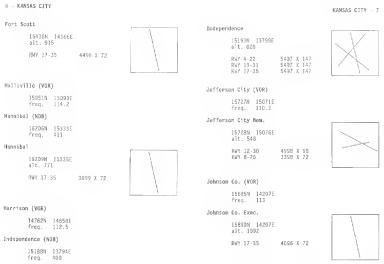
Brookfield Mem.

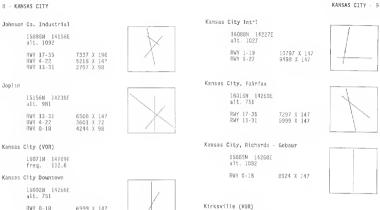
16249N 14782F alt. 807

RWY 17-35 2997 X 49









16400N 14959E freq. 114.6

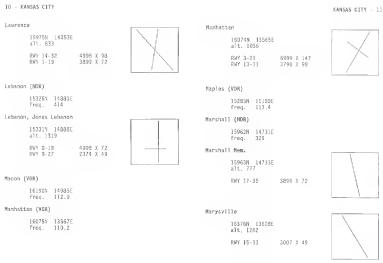
15972N 14051E freq. 284

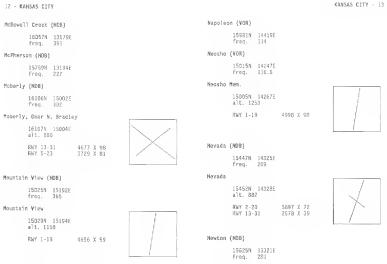
Lawrence (NDR)



RWY 3-21

5051 X 147





freq. 112.4

KANSAS CITY - 17 16 - KANSAS CITY Springfield Reg. Rolla National 15169N 14624E 15522N 15200E alt. 1148 RWY 1-19 7002 X 147 5497 X 147 RWY 4-22 RWY 13-31 5497 X 147 RWY 13-31 5598 X 147 St. Joseph (VOR) Salina (VOR)

freq. St. Joseph, Rosecrans Mem. Sedalia (NDB) 15795N 14729F



RWY 17-35 8058 X 147 RWY 13-31 5999 X 98 RWY 4-22 5097 X 98

16374N 14179E freq. 108.2

16295N 14178F

alt 827



RWY 0-18 RWY 5-23

Sedalia Mem.

Springfield (VOR)

freq.

freq. 281

15797N 14730E alt. 909

15212N 14642E 116.9

4998 X 98 3598 X 49

Tiger (VOR) freq.

> freq. 117.8

Topeka (VOR) 16034N 13942E

15893N 15010E



18 - KANSAS CITY KANSAS CITY - 19 Topeka, Billard Whiteman (VDR)

15750N 1459DE

15501N 13202E freq. 113.8

frea. 109

Wichita (VOR)

16006N 13916E alt. 879 RWY 13-31 5097 X 147 RWY 17-35 5097 X 147 RWY 4-22 3073 X 98 Topeka, Forbes 15957N I3899E alt. 1079 RWY 13-31 12818 X 196 RWY 3-21 7999 X 196

3207 X 72



Vichy (VOR)

15529N 15218F freq. 117.7

West Plains (NDB) 14922N 15138E

freq. 335

RWY 14-32

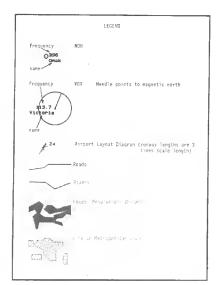
West Plains 14925N 15141F alt. 997

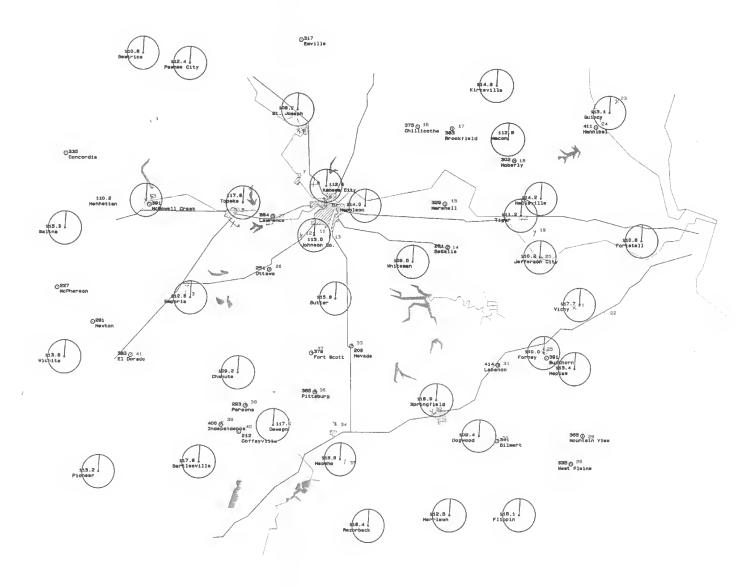


KANSAS CITY SECTIONAL

Harysville

| Harysville
| Hanhattan
| Emporla
| Emporla
| Topoka, Forbes





17597N 12617E freq. 112.7

Ainsworth

17695N 12618E alt. 2588

RWY 17-35 6799 X 147 RWY 12-30 5497 X 88

Albert Lea (VOR) 18074N 14727F

freq. 109.8 Albert Lea

18074N 14728E

alt 1256

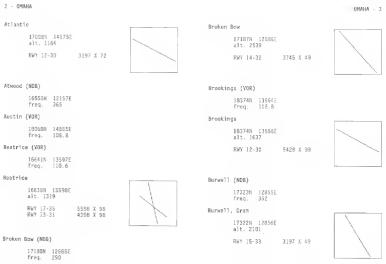
RWY 16-34 4496 X 98 RWY 4-22 2899 X 72

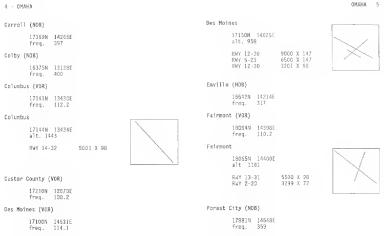
Amoni (YOR)

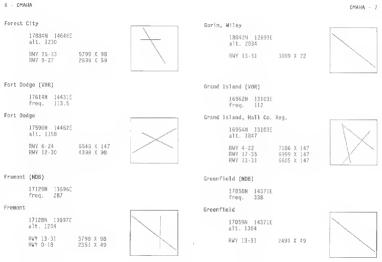
16736N 14521E freq. 116.7 Atlantic (NDB)

> 17096N 14177E freq. 365









Gurney Kearney (VOR) 17782N 13455E 16867N 12857E alt. 1305 freg. 111.2

Kearney

RWY 13-31 6097 X 98 RWY 1-19 3499 X 72

18300N 14730F freq. 111.2 Hastings (VOR)

16802N 13050F freq. 108.8

Hastings 16801N 13050E alt. 1955

2997 X 72

RWY 14-32 5598 X 98 RWY 4-22 4496 X 72

Huron Reg.

18433N 13227F alt. 1289

RWY 12-30

RWY 17-35

8 - NHAHA

Halfway (VOR)

7199 X 147

17082N 12335E freq. 375 Lincoln (VOR)

16906N 13616F freq. 116.1 Lipcoln

RWY 17-35

16870N 12866F alt. 2129

16400N 14959F

freq. 114.6

RWY 0-18

RWY 13-31

Kirksville (VOR)

Lee Bird (NDB)

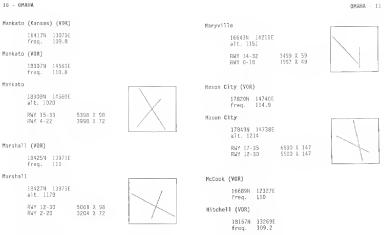
16876N 13608E alt. 1214 RWY 17-35 12900 X 196 RWY 14-32 8619 X 147

7091 X 147

5185 X 147

5497 X 98

OMAHA - 9



Mitchell North Platte, Lee Bird Fld

Neola (VOR) 17130N 13980E freq. 117.1 Newton (VOR)

12 - OMAHA

18165N 13270E

alt. 1302

RWY 12-30

RWY 17-35

17249N 14807E freq. 112.5

6701 X 147

5503 X 147

Norfolk (VDR) 17378N 13413E

freq. 109.6

Norfolk, Stefan Mem.

17376N 13413E alt. 1571

RWY 1-19 5799 X 147 RWY 13-31 5799 X 147

North Platte (VOR)

17054N 12310E freq. 117.4

17085N 12332E alt. 2778

RWY 12-30 RWY 12-30 RWY 8-26 RWY 17-35 O'neill (VOR) 17619N 13028E freq. 113.9

O'neill 17619N 13026E

alt. 2030 RWY 13-31

Omaha (VOR)

16999N 13950E

4398 X 72

















7999 X 147

6599 X 98

459B X 98

4434 X 98









OMAHA - 13















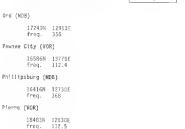




- 116.3

- frea.

14 - OMANA OMANA - 15
Omaha, Epplev Airfield Plants (UPP)



6887 X 147

6884 X 147

8498 X 147

6002 X 147

4295 X 72

17060N 13902F

alt. 984

RWY 14-32

RWY 17-35

RWY 14-32

184B1N 12594E alt. 1742 RWY 13-31

RWY 7-25

Pierre

freq. 329 Plattsmouth 16910N 13885F alt. 1200 RWY 16-34 2997 X 49 Sac City (NDB) 17520N 14213F freq. 356 Sac City 17522N 14212E alt. 1250 RWY 0-18 3499 X 59 RWY 14-32 2660 X 42

> 17512N 13789E freq. 414

Salix (NDB)

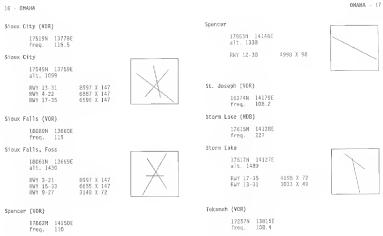
Platte Center (NDB)

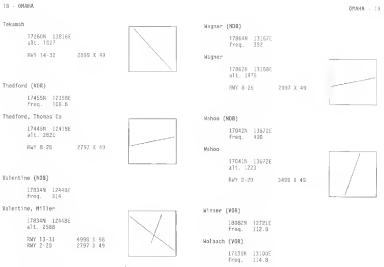
Plattsmouth (NDB)

17165N 13420E

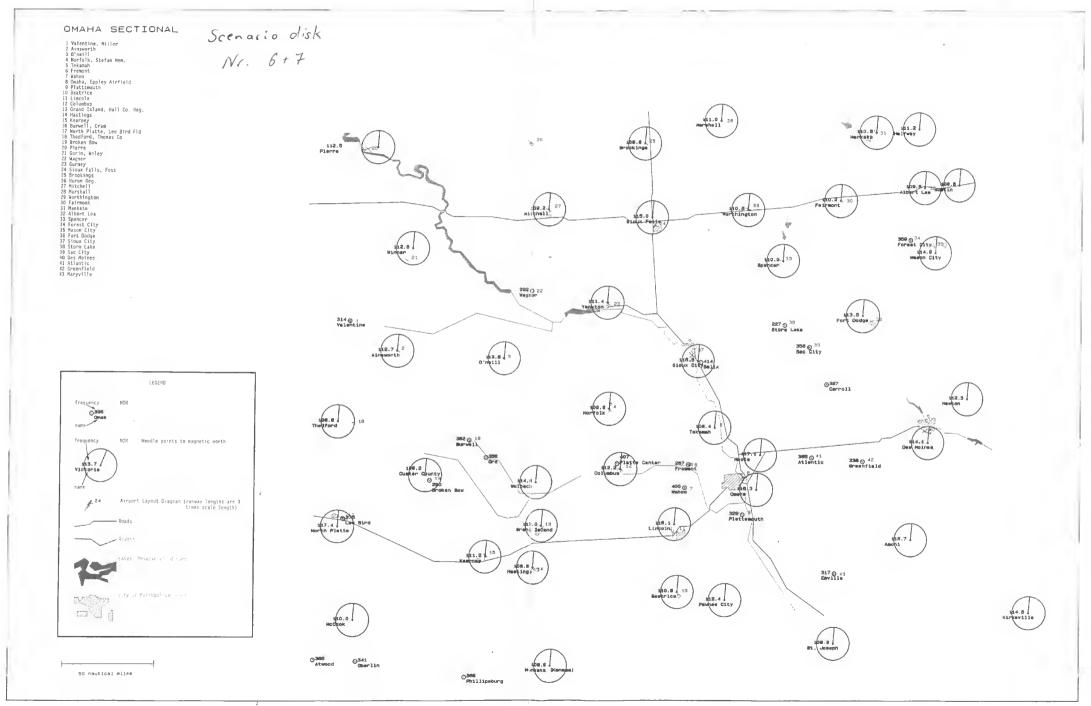
16910N 13885F

freq. 407





20 - DMAHA Worthington (YOR) 18073N 14037E freq. 110.6 Worthington 18077N 14038E alt. 1574 RWY 11-29 5503 X 147 RWY 17-35 4198 X 98 Yankton (YOR) 17784N 13452E freq. 111 4



WICHITA - 1

```
16555N 12157F
        freq. 365
Atwood - Rawlins Co.
        16555N 12156E
        RWY 16-34 3099 X 49
Bear Creek (NDB)
        15639N 11782E
        freg. 341
Beatrice (VOR)
        16641N 13597E
        freq. 110.6
Colby (NDB)
```

16375N 12128E freq. 400

Akron (VOR)

Anthony (VOR)

Atwood (NDB)

16800N 11472F freq. 114.4

15270N 12972F



15375N 11693E

freq. 246

WICHITA - 3



2 - WICHITA

1628IN 13266E

alt. 2594

RWY 14-32

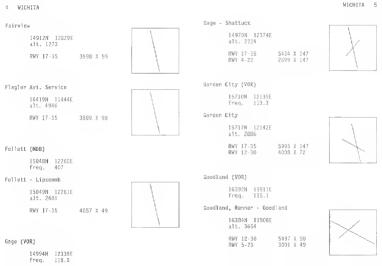
RWY 2-20

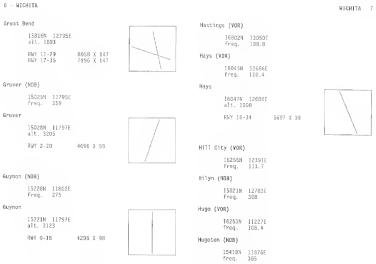
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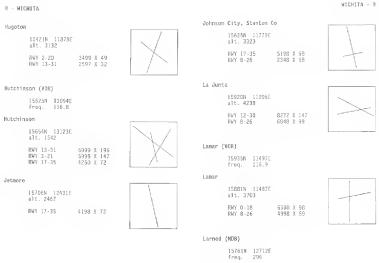
4647 X 98











Larned - Pawnee Co. Lyons - Rice Co 15763N 12711E 15785N 13013E alt. 2011 alt. 1692 3548 X 59 RWY 17-35 RWY 17-35 2997 X 49

Leoti, Mark Hoard Mem. 15978N 11967E alt. 3303 RWY 17-35 3158 X 42

2459 X 45

7097 X 147

7097 X 147

6996 X 147



Mankato (Kansas) (VOR) 16417N 13075E freq. 109.8 McCook (VOR)

Manhattan (VOR)

16075N 13567E

freq. 110.2

15589N 12327E freq. 110



McDowell Creek (NDB)

16057N 13579E

freq. 391

WICHITA

15769N 13194F freq. 227

McPherson (NDB)

Lyons (NDB)

RWY 8-25

15348N 12004E

freq. 112.3

15349N 12009F

alt. 2886

RWY 17-35

RWY 12-30

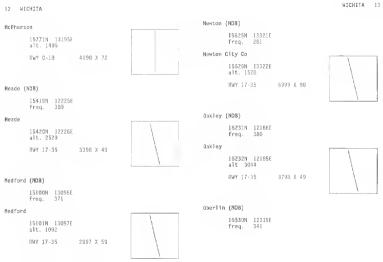
RWY 3-21

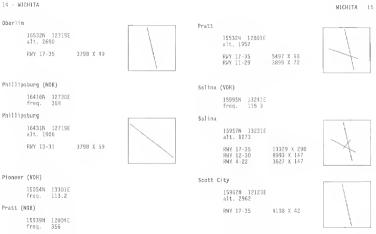
Liberal (VOR)

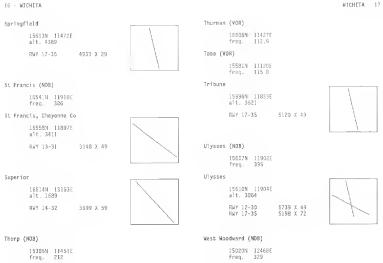
Liberal

10 - WICHTTA

15786N 13013E freq. 386







18 - WICHITA

Wichita (VOR)

15501N 13202F freq. 113.8

Wichita Mid - Continental 15460N 13250F alt. 1332

> RWY 1-19 RWY 14-32

RWY 1-19 10299 ¥ 147

14919N 13065E freq. 109

Woodring (VOR)

Woodward, West Woodward

15022N 12469F alt. 2188

RWY 5-23 RWY 11-29 RWY 17-35

5497 X 147 5497 X 147

7301 X 147

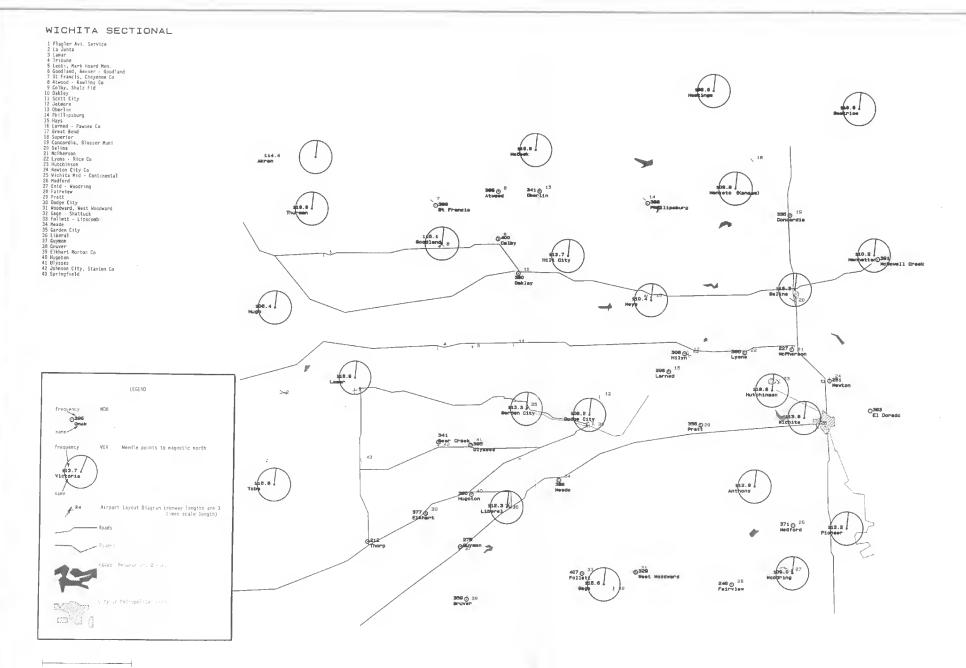
6300 X 147

5497 X 147

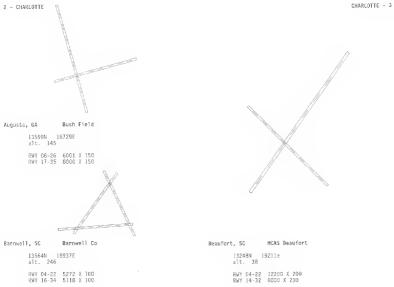










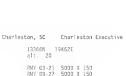


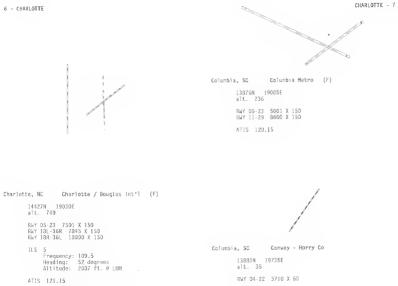


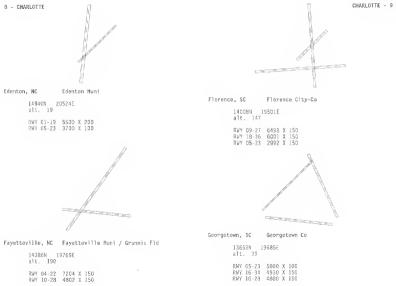
Charleston, SC Charleston AFB/Int*1

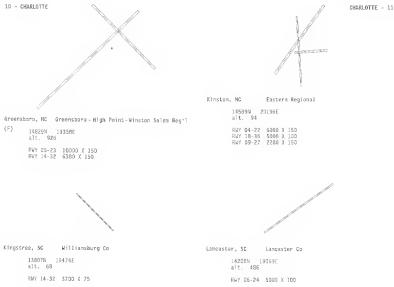
RWY 03-21 7000 X 150 RWY 15-33 9001 X 200

13448N 19417E alt. 46



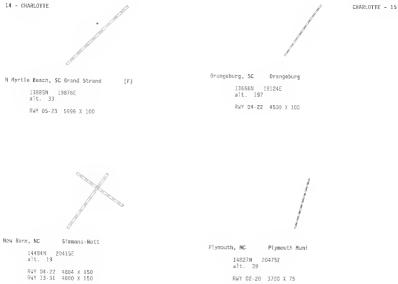


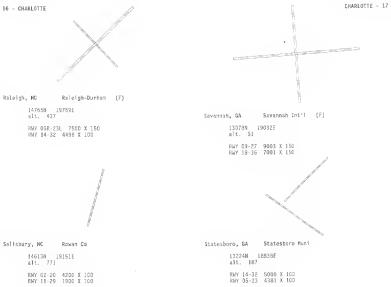


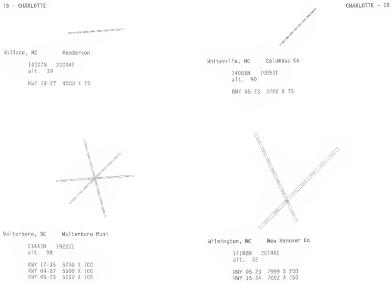


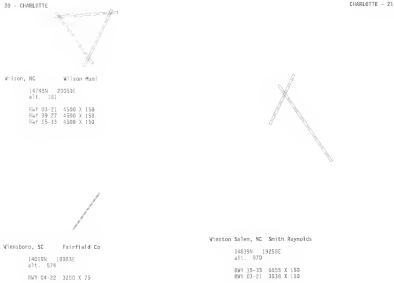
RWY 09-27 2950 X 50

RWY 01-19 3600 X 75

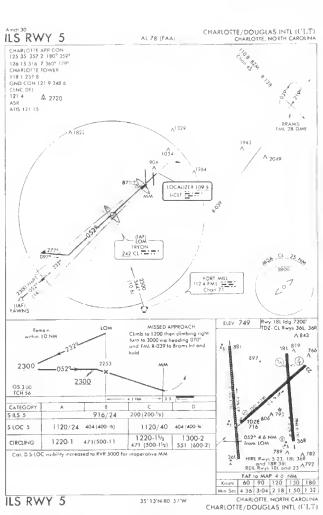






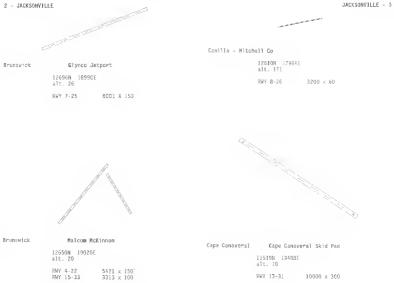


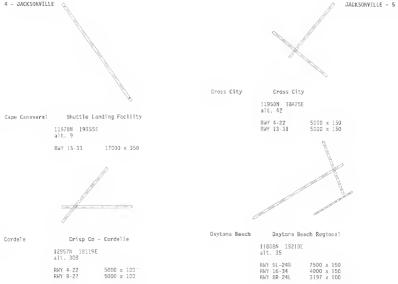
22 - CHARLOTTE		CHARLOTTE - 23
Allendale (VOR)	Fort Mill (VOR)	
13467N 18967E freq. 116.7	14330N 19033E freq. 112.4	
Barretts Mountain (VOR)	Grand Strand (VOR)	
14703N 18907E freq. 110.8	13886N 19859E freq. 117.6	
Charleston (VOR)	Greensboro (VOR)	
13449N 19427E freq. 113.5	14810N 19345E freq. 116.2	
Charlotte (VOR)	Kinston (VOR)	
14423N 1902BE freq. 110.6	14612N 20214E freq. 109.6	24 - CHARLOTTE
Chesterfield (VOR)	New Bern (VOR)	Tar River (VOR)
14201N 19283E freq. 108.2	14484N 20413E Freq. 113.6	14849N 20142E freq. 117.8
Columbia (VOR)	Raleigh - Durham (VOR)	Vance (VOR)
13837N 1903CE freq. 114.7	14766N 19770E freq. 117.2	13688N 19259E freq. 110.4
Fayetteville (VOR)	Sandhills (VOR)	Wilmington (VOR)
14385N 19771E freq. 108.8	14452N 19509E freq. 111.8	14145N 20151E freq. 117
Florence (VOR)	Savannah (VOR)	Wright Brothers (VOR)
14038N 19518E freq. 115.2	13103N 19057E freq 112.7	14900N 20845E freq. 111.6

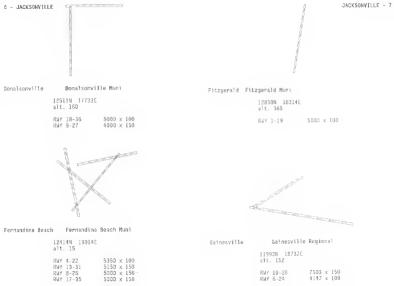


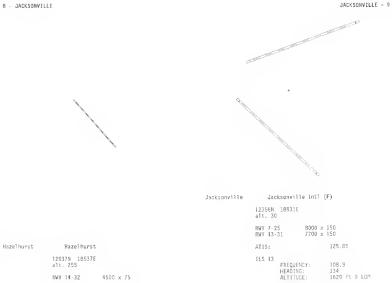
CITY AIRPORT NORTH EAST ALT. F ILS	CHARLOTTE AREA CHART
(Fuel) (Rwy Freq)	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Aiken Aiken Muni 13724 18819 529 Allendale Allendale Co. 13454 18991 160 Augusta Bush Fld 13599 18729 145 Barnwell Barnwell Co. 13564 18937 246 Beaufort MCAS Beaufort 13248 19211 38 Charleston Charleston AFB/Int'l 13448 19417 46 Charleston Charleston Executive 13366 19462 20	
Charlotte	WINSTON SALEM SMITH REYNOLDS SMITH REYNOLDS MOCKSVILLE TWIN LAKES WINSTON SALEM WINSTON SALISBURY ATIS 121.15 SANDHILLS FORT MILL 112.4 FORT MILL 112.4 REWBERU 113.6 FAYETEVILLE REWBERU 113.6 FAYETEVILLE
Wallace Henderson 14307 20094 39 Walterboro Walterboro Muni 13441 19222 98 Whiteville Columbus Co. 14081 19853 90 Wilmington New Hanover 14108 20146 32 Wilson Wilson Muni 14748 20059 161 Winnsboro Fairfield Co. 14019 18983 574 Winston Salem Smlth Reynolds 14839 19258 970	LANCASTER CO. CHESTERFIELD 108.8 CHESTERFIELD 108.8 FAYETTEVILLE MUNI GRANNIS FLD HENDERSON NEW BERN SIMMONSNOT SIMMONSNOT FLORENCE 115.2 FLORENCE 115.2 WHITEVILLE COLUMBUS CO. WHITEVILLE COLUMBUS CO.
Civil-Public use airport SANTA MONICA ATIS 119.15 175-50 Civil-Public use airport Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	COLUMBIA METRO ATIS 120.15 AIKEN MUNI ONNAY HORRY CO.
NAME vor	AUGUSTA BUSH FLD WILLIAMSBURG CO. MANNING MAN
FREOUENCY VORTAC (Distance Measuring Equipment Able) NAME FREOUENCY VOR DME	BARNWELL CO. ALLENDALE CO. ALLENDALE CO.
NAME FREOUENCY Non Directional Beacon	ALLENDALE 116.7 WALTERBORO CHARLESTON 113.5 National Miles 0 10 20 30 40 50
VOR.DME If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box. AIRPORT NAME ABBREVIATIONS CO County FLD Field INTL International MUNI MUNI MUNI If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.	STATESBORO CHARLESTON EXECUTIVE Statute Miles 1 1 1 0 10 20 30 40 50 North and east coordinates are canted at + 7° (clockwise) to compensate for orthogonal coordinate gnd overlaid on Lembert conformat conic projection.



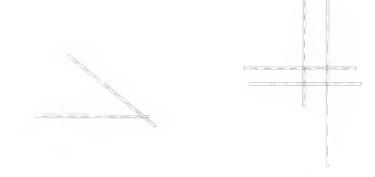




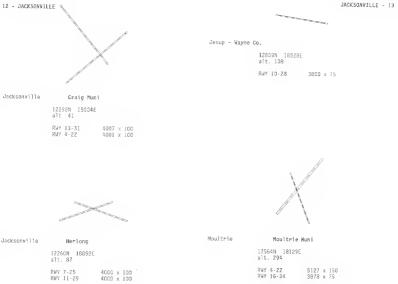


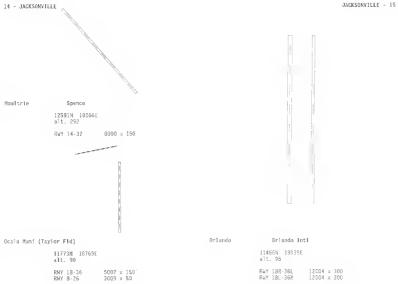


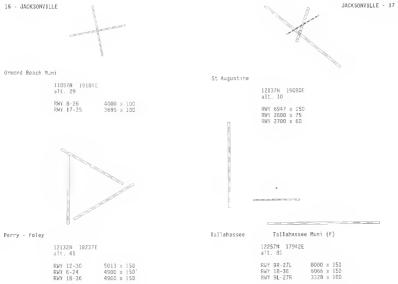
10 - JACKSONVILLE - 11

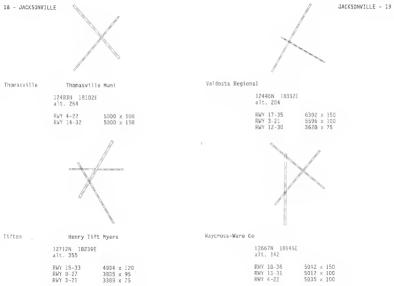


		Jacksonville	Cecil Fie	ld NAS
Jacksonville	Jacksonville NAS		12238N 18861E alt. 80	
	12247N 18942E alt. 22		RWY 18L-36R RWY 9L-27R	12500 x 200 8000 x 200
	RWY 9-27 8000 x 200 RWY 13-31 5977 x 200		RWY 9R-27L RWY 18R-36L	8000 x 200 8000 x 200









20 - JACKSONVILLE		JACKSONVILLE - 21
Alma (VOR)	Dinns (NDB)	
12788N 18591E freq. 115.1	12343N 18890E freq. 344	
Brooksville (NDB)	Donalsonville (NDB)	
11463N 18701E freq. 278	12512N 17735E freq. 352	
Brunswick (VOR)	Gainesville (VOR)	
12606N 19005E freq. 109.8	11939N 18706E freq. 116.2	
Caidy (NOB)	Geiger Lake (NDB)	
12472N 18003E freq. 338	11562N 19315E freq. 375	
Camilla (NDB)	Herlong (NDB)	
12610N 17965E Freq. 369	12261N 18893E freq. 332	
Cape Canaveral (NDB)	Homerville (NDB)	
11515N 19429E freq. 313	12576N 18511E freq. 209	
Cross City (VOR)	Jacksonville (VOR)	
11933N 18447E freq. 112	12299N 19003E freq. 114.5	

Kissimmee (NDB)

11415N 19099E freq. 329

Deland (NDB)

11753N 19131E freq. 201 22 - JACKSONVILLE

11527N 19127E

freq. 112.2

11859N 19185E free, 112.6

12510N 18123E

11629N 19156E

freq. 408

Ormand Beach (VOR)

freq. 245

Patten (NDB)

Sanford (NDB)

JACKSONVILLE - 23

freq.

12227N 17938E

12672N 18581E

freq.

freq. 110.2

11986N 18777E

frea. 269

Wakul (NOB)

Wayeress (VOR)

Wynds (NDB)

Leesburg (NDB)		Savannah (VOR)		
	18934E 335	13103N freq.	19057E 112.7	24 - JACKSONVILLE
Melbourne (VOR)		St Augustine (V	/OR)	Tift Myers (VOR)

freq.	335	freq. 112.7	24 - JACKSONVILLE
Melbourne (VOR)		St Augustine (VOR)	Tift Myers (VOR)
11358N freq.	19399E 11D	12140N 19073E freq. 109.4	12712N 18235E freq. 112.5

	freq.	11D 13339F	freq.	109.4		freq.	112.5
Ocala (VOR)		St Johns (NDB)		Valdost	a (VOR)	
	11773N freq.	18768E 113.7	12322N freq.	19045E 306		12402N freq.	18332E 110.4
Orlando	(VOR)		St. Petersburg	(VOR)	Vidalia	(NDB)	
	11527N	19127E	11203N	18631E		13076N	18622E

frea. 116.4

frea. 117.5

frea. 112.9

12326N 17928E

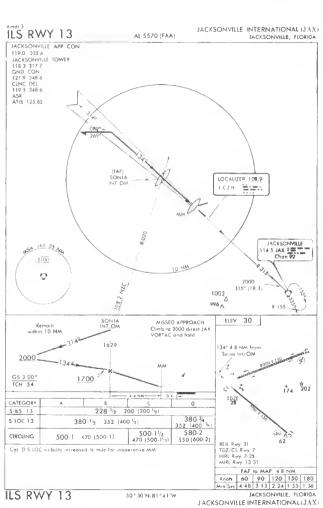
12340N 18607E frec. 112.9

12342N 18605E

Tallahassee (YOR)

Taylor (VOR)

Taylor (VOR)



AIRPORT		ACKSONVILLE AREA	JACKSONVILLE AREA CHART
CITY	AIRPORT	NORTH EAST ALT. F ILS	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Brooksville Brunswick Brunswick Camilla Cape Canaveral Cape Canaveral Cordele Cross City Daytona Beach Donalsonville Femandina Beach Fitzgerald Gainesville Hazelhurst	Bacon Co. Hernando Co. Glynco Jetport Malcom Mckinnon Mitchell Co. Canaveral Skid Pad Shuttle Landing Facility Crisp Co Cordele Cross City Daytona Beach Regional Donalsonville Muni Fernandina Beach Muni Fitzgerald Muni Gainesville Regional Hazelhurst Jacksonville Int'I	12789 18598 201 11461 18702 76 12696 18990 26 12650 19020 20 12610 17964 171 11519 19408 10 11578 19355 9 12957 18119 308 11950 18425 42 11808 19210 35 12511 17733 160 12414 19014 15 12838 18314 365 11993 18737 152 12937 18537 255 12356 18931 30 * 108.9/13	CRISP CO. CORDELE HAZELHURST FITZGERALD MUNI ALMA, GA 115.1 BACON CO. WAYNE CO. SIYNCO JETPORT
Jacksonville Jacksonville Jacksonville Jesup Moultrie Moultrie Ocala (Taylor) Orlando Ormond Beach Perry St. Augustine Tallahassee Thomasville Tifton Valdosta	Jacksonville NAS Cecil Field NAS Craig Muni Herlong Wayne Co. Moultrie Muni Spence Ocala Muni (Taylor) Orlando Int'l Ormond Beach Muni Foley St. Augustine Tallahassee Muni Thomasville Muni Henry Tift Myers /aldosta Regional Ware Co.	12247 18942 22 12238 18861 80 12298 19004 41 12260 18892 87 12809 18828 108 12564 18129 294 12591 18166 292 11773 18769 90 11466 19139 96 11466 19139 96 12132 18237 45 12137 19080 10 12257 17942 81 12483 18102 264 12712 18239 355 12446 18332 204 12667 18645 142	DONALSONVILLE MUNI TAPLAHASSEE, FL TALLAHASSEE MUNI TALLAHASSEE
	LEGEN	D	FOLEY ST. AUGUSTNE PL'S
87 0 O	Civil-Public	use airport	GAINESVILLE, FL 116.2 ST. AUGUSTINE ST. AUGUSTINE FL. 116.2
SANTA MONICA ATIS 119.15 175-50 NAME FREQUENCY ©	having eme Airport Nan Advisory Fr	rivate-Nonpublic use airport, rgency use or landmark value ne equency (if available) eet) — Length (hundreds of feet)	GAINESVILLE RÉGIONAL WYNDS 269 ORIGON DITA ORIGON DEACH MUNI OPINOND BEACH MUNI OPINOND
NAME FREQUENCY **	VORTAC (Di	istance Measuring Equipment Able)	OCALA, FL. OCALA MUNI (TAYLOR) DELAND DELAND DELAND
NAME FREOUENCY	VOR/DME		SANFORD 408
NAME FREQUENCY O	Non Direction	onal Beacon	LEEPBURG 335 SRIVLE DANDING FACILITY
VOR/DME NAME FREQUENCY	symbol will b	irectly on an airport, only the airport se shown. The VOR facility type is top of the box.	Nautical Miles 0 10 20 30 40 50 BROOKSVILLE 278 ORLANDO 112.2 CAPE CANAVERAL 313 GEIGER LAKE 375 ORLANDO INTL
AIRPORT NAME ABO CO FLD INTL MUNI (PVT)	County Field International Municipal	rt (prior permission before landing)	North and East coordinates are canted at + 6° (clockwise) to compensate for orthogonal coordinate grid overlaid on £ambert conformal conic projection. LAKELAND 116.0 SATELLITE 257



	d d
Ft Myers,	Page Fld
	10651N 18984E

alt. 18 RWY 5-23 RWY 13-31

4997 x 150

2 - MIAMI - 3

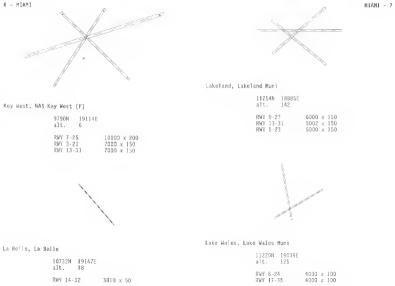


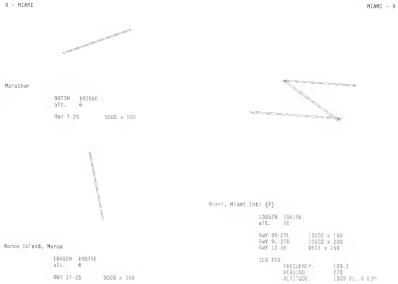


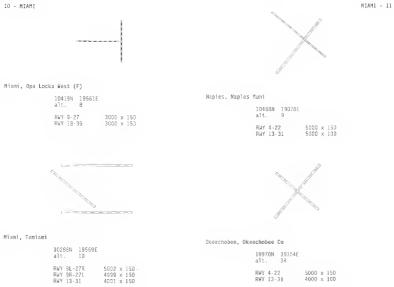
Εt	Pierce.	St	Lucie	Cn	Intl

Ft Myers, SW Florida Regional	11083N 19528E alt. 24
10634N 19027E alt. 3 1	RWY 9-27 5000 x 200 RWY 4-22 5000 x 200 RWY 14-32 5000 x 100
DIN 6 74 0400 150	RWY 18-36 5000 x 200

MIAMI - 5 4 - MIAHl ____ Frostproof, River Ranch Resort lmmokalee, Immokalee 11184N 19200E alt. 55 10599N 19167E alt. 37 RWY 16-34 4950 x 75 RWY 4-22 5000 x 150 RWY 9-27 5000 x 150 RWY 18-36 5000 x 150 _____ Homestead General Key West, Key West Intl 10223N 19528E alt. 9779N 19085E alt. RWY 18-36 4000 x 100 ° RWY 9-27 3000 x 75 RWY 9-27 4800 x 100







12 - MEAM1 MIAM1 - 13



Pahokee, Palm Beach Co Glades

10770N 19429E alt. 17 RWY 17-35 RWY 7-25 4620 x 75 1617 x 100



alt. 20 RWY 14-32

RWY 5-23

RWY 10-28



Pompano Beach, Pompano Beach Airpark 10558N 19674E

4420 x 150

4000 x 150 3500 x 100

Punta Gorda, Charlotte Co

10791N 18922E alt. 25 RWY 3-21

RWY 9-27

RWY 15-33

5000 x 150 5000 x 150

4800 x 150

14 - HIAHI NIAMI - 15



Sarasota, Sarasota-Bradenton 10983N 18696E alt. 28 RWY 14-32 7003 x 150 5004 x 150 RWY 4-22

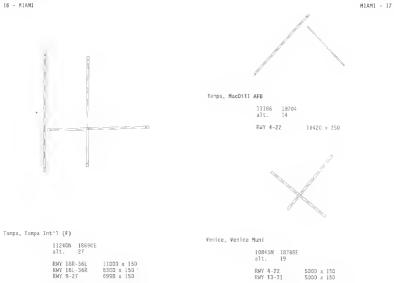
St Petersburg-Clearwater Intl

11205N alt.	18630E 11

RWY 17L-35R 7989 x 150 RWY 4-22 5500 x 150 RWY 9-27 5165 x 150 RWY 17R-35L 4000 x 75

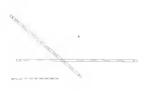
Searing, Seoring Airport and Industrial Park \$11041N\$ 19160E alt. 63

11041N 19160E alt. 63 RWY 18-36 5190 × 300 RWY 14-32 5190 × 300



IS - MIAMI MIAMI - I9





109.3

96 1906 ft @LOM

		W	est Palm Beac	h, Palm Beach In	tī (F)	
				10746N 19662E alt. 19		
Vero Beach, Vero Beach Muni (F)				RWY 9L-27R RWY 13-31 RWY 9R-27L	7989 x 150 6930 x 150 3152 x 75	
11154N 19505E alt. 25				ATIS:	123.75	
RWY 11R-29L RWY 4-22 RWY 11L-29R	7180 x 100 4975 x 100 2637 x 50			ILS 9L FREQUE HEADIN ALTITU	G: 96	

20 - MIAMI MIAMI - 21 Winter Haven, Bartow Muni



9749N alt.

RWY 10-28



Congo Town

20746E 15

5000 x 100

Freeport Int'l (F)

10737N 20209E alt. 7 RWY 6-24

11000 x 150

MIANI - 23 22 - MIAMI



10782N 20338E alt. 9

RWY 6-24 7200 x 150

Nassau Int'l (F)

Marsh Harbour ID783N 20830E alt. 10

RWY 9-27 5000 x 150

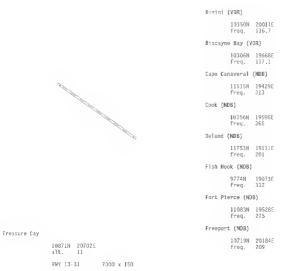
South Bimini

10350N 20020E alt. 10

10136N 20749E alt. 10

RWY 9-27 5000 x 150

24 - MIAMI - 25



26 - MIAM1		MIAMI - 27
Freeport (VOR)	Kissimmee (NDB)	
10735N 20210E freq. 113.2	11415N 19099E freq. 329	
Ft Lauderdale (VOR)	La Belle (VOR)	
10477N 19662E freq. 111.4	10759N 19159E freq. 110.4	
Ft Myers (VOR)	Lakeland (VOR)	
10653N 18982E freq. 117.6	11251N 18885E freq. 116	
Ft Pierce (NDB)	Leesburg (NOB)	
11084N 19529E freq. 275	11631N 18934E freq. 335	
Ft. Lauderdale (VOR)	Marathon (NDB)	

10478N 19663E 9863N 19340E freq. 111.4 freq. 260

Ft. Myers (VOR) Marsh Harbour (NDB) 10652N 18983E 10783N 20831E freq. 117.6 freq. 361

Geiger Lake (NDB) Melbourne (VOR)

11562N 19315E 11346N 19407E

freq. 375 freq.

Key West (VOR) Miami (NDB)

9791N 19067E 10345N 19682E

freq. freq. 322

Punta Gorda (VOR) Miami (VOR) 10422N 19547E 10791N 18924F 115.9 freq. 110.2 freq.

MIAMI - 29

freq. 117.3

Rubin (NDB) Nassau (VOR) 10743N 19619E 10133N 20759E 356 freq. 112.7 freq.

2B - MIAMI

Freq. 242

OCALA ,FL (VOR) Sanford (NDB)

11629N 19156E 11770N 18767E 113.7 freq. 408 frea. Sarasota (VOR) Orlando (VOR) 11527N 19127E 10985N 18695F

frea. 112.2 freq. 115.2 Pahokee (VOR) Satellite (NDB)

10772N 19430E 11334N 19381E freq. 112.4 freq. 257 Sebring (NDB)

Palm Beach (VOR) 30 - M1AMI 10742N 19667E 11041N 19156E frea. 382 freq. 115.7

St. Petersburg (VOR) Perrine (NDB)

Treasure Cay (VOR) 10867N 20710E

11203N 18631E 10287N 19543F

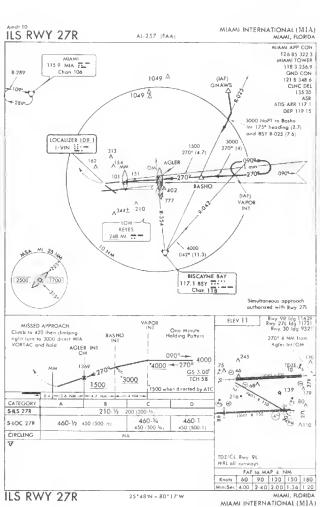
freq. 116.4 freq. freq. 266

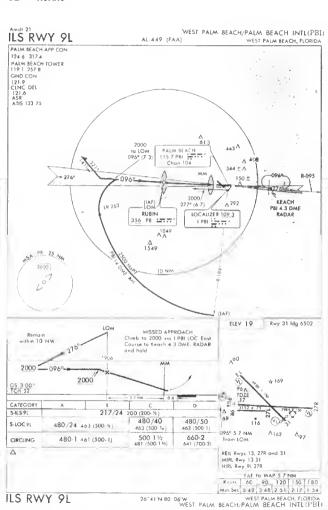
Vero Beach (VOR) Treasure Cay (NDB)

Plantation (NDB)

19478E 10847N 20741E 10503N 19636F

freq. 233



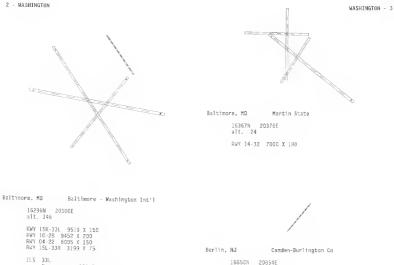


AIRPORT DIRECTORY - MIAMI AREA			MIAMI AREA CHART
CITY AIRPOR	T NORTH EAST	ALT. F ILS	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Ft Lauderdale Ft Myers Ft Myers Ft Myers Ft Pierce Ft Myers Ft Lucia Frostproof Homeste ad Immokale Key West Key West Key West La Belle Lakeland Lake Wales Marathon Marot Osland Marni Miami Mapies Okeechobe Pahokee Pompano Beach Punta Gorda St Petersburg Sarasota Sebring Sarasota Sebring Sarasota Sebring Ft Laude Homeste Ft Leude Homeste Mokati Marok Marathon Marot Miami Naples Naples Okeechole Palm Bes Pompano Charlotte Clearwate St Petersburg Sarasota Sebring Sarasota Sebring Sarasota Sebring Ft Laude Homeste Homeste Immokal Key West Marathon Marot Marot Opa Lock Tamian Naples Na	ridale Exec 10532 19650 1 10651 18984 da Regional 10634 19027 Co. Int'l 11083 19528 19528 10599 19167 t Int'l 19732 19147 Muni 11254 18885 10599 19144 19200 19075 10 10028 19561 10028 10	ALT. F	TANDA INTL AMELIAN MINN BARTON MINN BARTON MINN STREETERBURG LAR WILLS WILL STREETERBURG LAR WILL STREETERB
			Key WEST NITL 20
LEGEND			FISH HOOK ()
g o o	Civil-Public use airport		INCOTOWN
SANTA MONICA Airport Name ATIS 119.15 Advisory Frequency (if available) 175-50 Elevation (feet) — Length (hundreds of feet)			
NAME FREQUENCY 9	VOR		
NAME FREOUENCY ♥	VORTAC (Distance Measuring	Equipment Able)	
NAME FREOUENCY 0	VOR/DME		Nautical Miles 9 10 2 30 40 50
NAME FREOUENCY O	Non Directional Beacon		Statute Miles 0 10 20 130 40 50
VOR/DME_ NAME FREQUENCY	If VOR falls directly on an airport symbol will be shown. The VOR shown at the top of the box.	, only the airport facility type is	+ 5" (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.



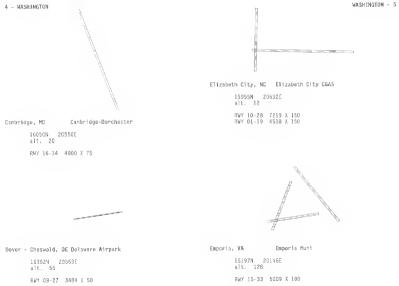
Atlantic City, NJ Atlantic City (F) 16507N 20982E alt. 76

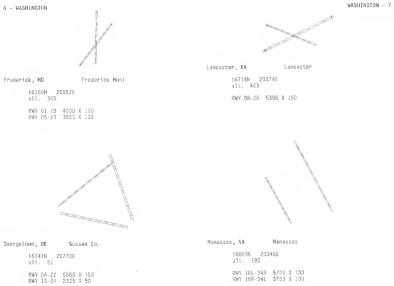
RWY 04-22 6144 X 150

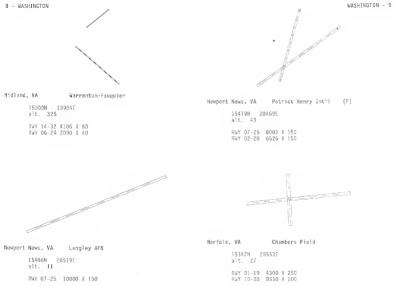


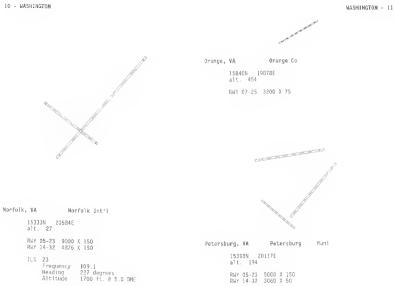
ILS 33L Frequency: 111.7 Heading: 332 degrees Altitude: 1465 ft 0 LOM

alt. 138 RWY 05-23 2590 X 50









12 - WASHINGTON - 13





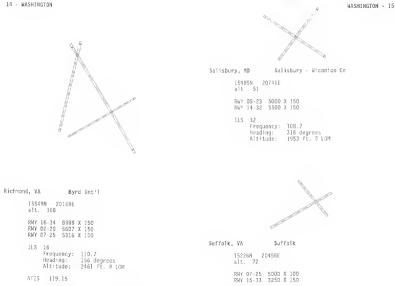
Philadelphia, PA Philadelphia Int'l (F)

16651N 20733E alt. 21 RWY D9L-27R 9500 X 150 RWY D9R-27L 10500 X 200 RWY 17-35 5460 X 150

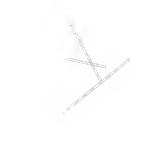
ILS 9R Frequency: 109.3 Heaching: 85 degrees Altitude: 1855 ft. 0 LOM Philadelphia, PA Northeast Philadelphia (F)

16751N 20801E
alt. 121

RMY 05-24 7000 X 150
RWY 15-33 5000 X 150



16 - WASHINGTON MASHINGTON - 17





Trenton, NJ Mercer Co.

16849N 20854E
alt. 213

RWY 06-24 6006 X 150 RWY 16-34 4800 X 150 RWY 11-29 2999 X 150 15307N 20649E alt. 22 RWY 05L-238 8000 X 150 RWY 05R-23L 12000 X 200 RWY 14L-32R 8000 X 150 RWY 14L-34R 8000 X 200

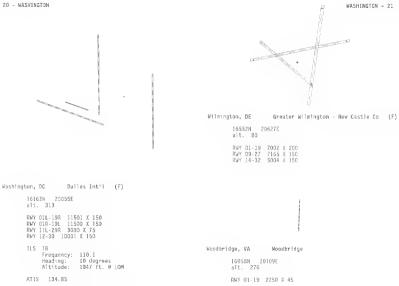
Virginia Beach, VA Oceana NAS

18 - WASHINGTON - 19

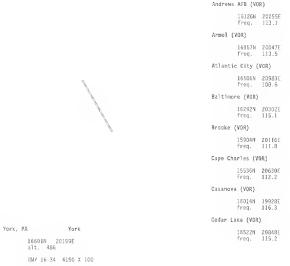




	Washington, DC Washington Nat'l
Washington, DC Andrews AFB	16135N 20192E
16127N 20255E alt, 281	alt. 15
RWY 01L-19R 9330 X 200 RWY 01R-19L 9755 X 150	RNY 03-21 4905 X 150 RNY 15-33 5189 X 200 RNY 18-36 6869 X 150



22 - WASHINGTON - 23



15219N 20317E 15228N 20003E freq. 110.6

freq. 112.9 Frederick (VOR) Martinsburg (VOR)

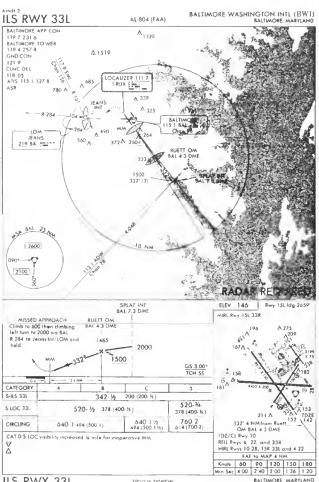
16366N 20054E 16335N 19898E freq. 109

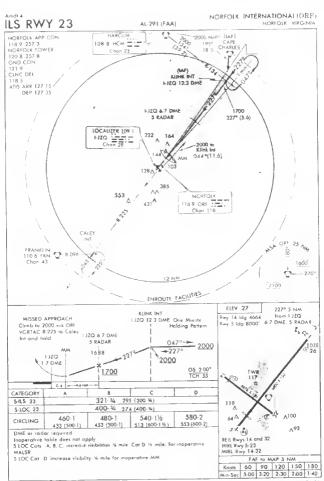
freq. 112.1

Gordonsville (YOR) Middle River (VOR)

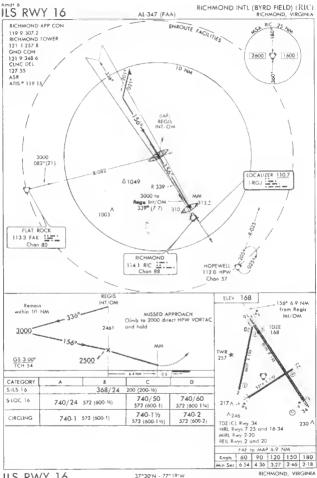
15734N 19859E 16368N 20376E freq. 115.6 freq. 116.6

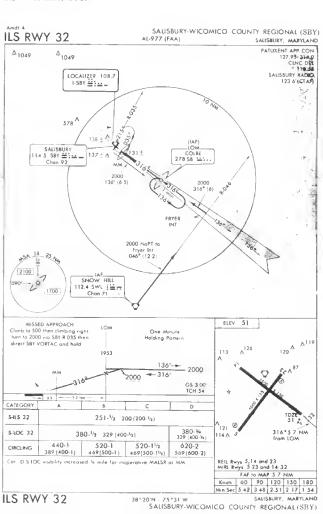
16220N 19811E freq. 115.3

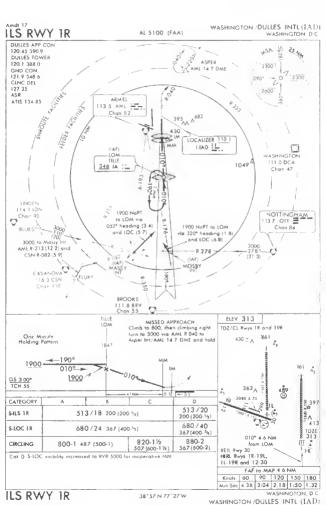




PHILADELPHIA INTERNATIONAL (PHL) ILS RWY 9R AL-320 (FAA) PHILADELPHIA PENNSYLVANIA BALDN FIX MINIMA S LOC 98 128 4 343 6 Cat. A. B. 500/24 479 (500 1/s) PHILADELPHIA TOWER Cat C 500/40 479 (500-%) A A 1421 118 5 263 0 Cal D 500/50 479 (500 1) GND CON SALDN FIX MINIMA SIDESTEP 91 121 9 348 6 CIRCLING Cat A 540-1 526 (600-1) CINC DEL Cot A 540-1 519 (600-1) LIB 85 348 6 Cat B 600-1 586 (600 1) Cat 8 600-1 579 (600-1) Cat C 600-11/2 579 [600-1/2] Cot C 600-11/2 586 (600 11/2) ASR Cat D 640-2 619 (700-2) ATIS 133 4 Cot D 640-2 626 (700-2) IAF. MODENA 113 2 MXE = ... Chon 79 263_A 170 A 222 121 ^ - A 322 NAAS MUSTIN 1900 259 (ABANDONED) 085016.51 A294 085" BALDH INT 265 LOCAUZER 109 3 (IAF) _265 Chan 30 KELEE INT/OM I-PHL 7 4 DME BWINE INT I-PHE 14 DME Ch 000 25 DUPONT 2500 114.0 pgo==== Chan 87 112.5 OOD = ... Chan 75 R-212 ELEV 21 INT/OM I-PHL 7.4 DME MISSED APPROACH Climb to 1500, then climbing One Minute Halding Pattern right turn to 2000 direct 1856 OOD VORTAC and hold. Rwy 17-35 5460 X 150 I. PHI 1900 --- 265° 8ALDN 1 9 DME TOZE 085: 1900 085° 5 5 NM GS 3 00 ° from OM 680 CATEGORY A D 221/20 SHLS 9R 221/18 200 (200-1/2) 680/60 680-11/2 S-LOC 9R 680/24 659 (700 1/1) 659 (700-1%) 659 (700-11/5) SIDESTER 680-134 680-2 680-1 666 (700 1) RWY 9L 666 (700-134) 666 (700-2 REIL Rwys 9L and 35 680-134 680-2 TDZ/CL Rwy 9R 680-1 659 (700 1) CIRCLING 659 (700-134) 659 (700-2 HIRL Rwys 91 27R, 98-27L and 17-35 FAF to MAP 5.5 NM Δ 60 90 120 150 180







AIRPOI	PT DIDECTORY	- WASHINGTON AREA	WASHINGTON AREA CHART
CITY	AIRPORT	NORTH EAST ALT. F ILS	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Atlantic City Baltimore	Atlantic City Int'I Washington Int'I	16507 20982 76 * 16296 20300 146 111.7/33L	HARRISBURG LANCASTER POTTSTOWN 1165 HARRISBURG 112.5 LANCASTER 117.3
Baltimore	Martin State	16367 20376 24	7º PHILADELPHIA
Bertin Cambridge	Camden-Burlington Co Cambridge-Dorchester	. 16650 20854 138 16050 20550 20	18 G PHILADELPHIA INTU DEDIM CAMPEN
Dover-Cheswold	Delaware Airpark	16362 20663 56	YORK MODERA MELINGTON CO.
Elizabeth City Emporia	Elizabeth City Emporia Muni	15055 20632 12 15197 20146 126	0 DUPONT 1140
Frederick	Frederick Muni	16366 20052 305	HAGERSTOWN 3 DATE TO STATE OF THE PROPERTY OF
Georgetown Lancaster	Sussex Co. Lancaster	16141 20770 51 16714 20374 403	117.9 GREATER WILMINGTON
Manassas Midland	Manassas Warrenton-Fauquier	16063 20046 193 16000 19984 325	NEW CASILED 115.2
Newport News	Langley AFB	15406 20519 11	112.1 12.8 112.8 112.8 112.8
Newport News Norfolk	Patrick Henry Int'l Chambers Field	15419 20469 43 * 15347 20553 27	FREDERICK 109.0 MARTIN STATE KENTON 111.4
Norfolk	Norfolk Int'l	15333 20584 27 109.1/23	MARTINI STATE 111.4
Orange Petersburg	Orange Co. Petersburg Muni	15840 19878 454 15398 20117 194	The source of th
Philadelphia ATIS 133.4	Philadelphia Int'l	16651 20733 21 * 109.3/9R	WASHINGTON DULLES INTL. WASHINGTON WASHINGTON
Philadelphia Richmond ATIS 119.1	Northeast Philadelphia Byrd Int'l 5	16751 20801 121 " 15549 20169 168 110.7/16	WATERLOO]
Salisbury Suffolk	Salisbury-Wicomico Co Suffolk	. 15985 20741 51 108.7/32 15226 20456 72	WASHINGTON NATL ANDREWS AFE
Trenton	Mercer Co.	16849 20854 213	MANASSAS MANASSAS ALLEGANDO AND
Virginia Beach Washington	Oceana NAS Andrews AFB	15307 20649 22 16127 20255 281	CASANOVA 113.1 PORCHESTER
Washington	Washington Int'l	16135 20192 16	MIDLAND WARRENTON-FAUOUIER
Washington ATIS 134.8	Dulles Int'i	16163 20055 313 * 110.1/1R	SALISBURY
Wilmington	Greater Wilmington- New Castle Co.	16552 20627 80 °	BROOKE 111.5 SALISBURY WICOMICO CO.
Woodbridge York	Woodbridge York	16058 20109 276 16601 20199 486	PATUZĖNT PATUZĖNT PATUZĖNT
	LEGE	END	GORDONSWIZE 15
27 4 o	Civil-Pub	fic use airport	115.8
®		d/Private-Nonpublic use airport, mergency use or landmark value	RICHMOND 114.1
SANTA MONICA			
ATIS 119.15 175-50		r Frequency (if available) n (feet) — Length (hundreds of feet)	FLAT ROCK 113.3 BYRD FLD HOPEWELL 112.0 HOPEWELL
NAME FREQUENCY	o VOR		NEWPONI NEWS CHARLES
			PATRICKLENGUNT
NAME FREQUENCY	♥ VORTAC	(Distance Measuring Equipment Able)	PETERSBURG CONTROL OF THE PETERSBURG CONTROL
NAME FREOUENCY	□ VOR/DMI	E	NORFOLK NTL
NAME FREQUENCY	O Non Dire	ctional Beacon	LAWRENCEVILLE 112.9 SUFFOLK NORFOLK
VOR/DME NAME FREOUENCY	symbol w	ls directly on an airport, only the airport vill be shown. The VOR facility type is the top of the box.	EMPORIA 18.9 Nautical Miles 0.10 20 30 40 50 Statute Miles 0.10 20 30 40 50
	ABBREVIATIONS		COFFELD SELIZABETH CITY Modify and cast contribute and control at
CO FLD	County Field		114.4 4 + 77 (adoctive) to compensate for ortho-
INTL	Internation		TAR RIVER gonal coordinate grid overlaid on Lambert conformat conic projection.
MUNI (PVT)	Municipa Private Ai	if irport (prior permission before landing)	ormal conic projection.

alt. 705

Aumra

RWY 9-27 5100 X 100 RWY 18-36 3205 X 75

17152N 16393E

17732N 16459E freq. 116.4



Battle Creek (VOR)

Badger, WI (VOR)

17402N 17415E freq. 109.4

Battle Creek/W.K. Kellogg Reg. (BTL) (F) 17402N 17418E

RWY 13-31 RWY 9-27 RWY 5-23

alt. 954

4835 X 100 4025 X 150 10005 X 150



Benton Harbor, MI

173HN 17046E alt. 643

RWY 9-27

RWY 18-36 RWY 13-31

5110 X 100 2500 X 100

3660 X 100

CHICAGO - 3 Bloomington - Normal, IL (F) Capital (CAP) (VOR)



2 - CHICAGO

Bloomington, IN (VOR) 16024N 17012E freq. 110.2

Boiler, IN (VOR) 16632N 16852E

16593N 16246E

6500 X 150 3730 X 100

alt. 876

RWY 11-29

RWY 3-21

frea. 115.6

Bradford, IL (VOR) 16890N 16042E

freq. 114,7 Burlington, IA (VOR) frea.

16709N 15604E 1114

Cedar Rapids Muni (CID) (F)

RWY 13-31 Cedar Rapids, IA (VOR) 17208N 15330E freq.

frea

16337N 16020E

17209N 15355E alt. 863

RWY 9-27

frea. 112.7

Cappy, W1 (MK) (NDB) 1760SN 16570E frea. 410

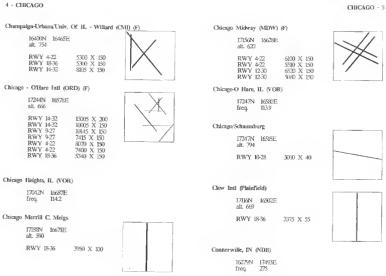
117.6

110

16464E

Champaign, IL (VOR) 16397N

2000 X 150 5455 X 150



Danville, IL (DNV) Dells, WI (VOR) 17920N 15997E 1647IN 16685E

alt. 692 RWY 3-21 5400 X 100 4005 X 100 RWY 16-34 Danville, IL (VOR)

Du Page

RWY 10-28 RWY 15-33 RWY 4-22

17213N 16466E alt. 758

17422N 15684E

115.1

freq.

4005 X 80 3405 X 100 1505 X 100

CHICAGO - 7

Davenport, IA (VOR) 1713IN 15757E

freq.

6 - CHICAGO

113.8 freq. Dayton, OH (VOR) 16427N 17731E

16511N 16695E

111

RWY 18-36 Dubuque, IA (VOR)

freq.

alt. 1076

RWY 13-31

Dubuque Muni (F)

1742IN 15684E



Deana (NDB) 17240N

freq. 114.5

> 16535E 350

Dupage, IL (VOR)

Dwight (NDB)

115.8 108.4

17202N 16433E frea.

16874N 16406E frea. 344

6500 X 150

4900 X 150

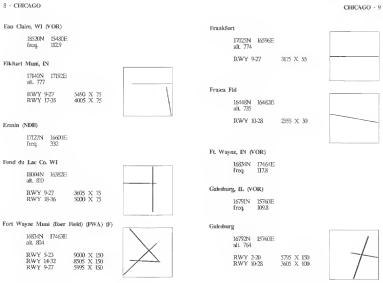
freq.

Decatur, IL (VOR)

16269N 16276E

freq.

117.2



10 - CHICAGO CHICAGO - 11 Gibson City, IL Horlick, WI (VOR) 16594N 16461E 17569N 16601E alt. 758 frea. 117.7 RWY 18-36 2595 X 30 Howell (Chicago/Blue Island) 17100N 16627E

alt. 600 Goshen, IN (VOR) RWY 12-30

3060 X 40 17059N 17176E RWY 18-36 2600 X 35 freq. 113.7

Grand Rapids, MI (VOR) Indianapolis, IN (VOR) 17611N 17330E 16316N 1708SE 1163 freq. 110.2 freq.

Grand Rapids/Kent Co Intl (GRR) (F) Iowa City Muni. IA 17643N 1732IE 17(01N 15405E alt. 794 alt. 663

RWY 8-26 10000 X 150 RWY 17-35 RWY 18-36 3400 X 100 RWY 12-30 RWY 8-26 3920 X 75 RWY 6-24

Jackson, MJ (VOR)

Green Bay, WI (VOR)

18354N 16485E

freq. 117

Grisson, IN (VOR)

16677N 17146E freq. 1165

17398N 17669E freq. 109.6 Jacksonville, IL (VOR)

16284N

frea. 108.6

15816E

3905 X 150























Janesville/Rock Co. 17509N 16213E alt. 807

> RWY 13-31 RWY 4-22 RWY 18-36

Joliet, IL (VOR) 17056N 16449E 1123 freq.

Joliet 17038N 16490E alt. 581

RWY 12-30

Kalamazoo (VOR)

17364N 17325E freq. 109

5400 X 150

6700 X 150

5000 X 75

2975 X 100

Kankakee, IL (IKK) (F)

Kedzi (NDB) 17135N

16846N 16597E alt. 626 RWY 4-22 RWY 16-34

Kalamazoo Co (AZO) (F)

alt. 872

RWY 17-35

RWY 5-23

RWY 9-27

17364N 17325E

3205 X 75



6500 X 150

4005 X 150

3355 X 150

5985 X 100





248

























freq.















Knox,

EN	(VOR)	





frea. 109.8 La Crosse (VOR) 18056N 15526E 108.4 freq

La Crosse, WI (F) 18057N 15527E alt. 653 RWY 3-21 5300 X 150 RWY 13-31 5300 X 150 RWY 18-36 8535 X 150

Lansing, MI (VOR) 17592N 17584E.

freq.

Lewis Univ.

Lone Rock, WI (VOR)

17309N 17574E

17052N 16697E

1708IN 16518E alt. 672

RWY 9-27

Litchfield, MI (VOR)

fren. 111.2

freq. 108.6

17812N 15880E

freq. 112.8

Madison, WI (VOR) 17731N 16U9E

3000 X 55



Marshalltown, IA

Manitowoc Co. WI 18159N 16633E

alt. 649

freq.

alt. 974

Marion, IN (VOR) 16617N 1730IE 108.6

17729N 16119E

4700 X 100

5845 X 150

9040 X 150

3345 X 100

5005 X 100

ait. 863

RWY 5-23

RWY 14-32

RWY 18-36

17319N 14974F. RWY 12-30 5000 X 100 RWY 18-36 3800 X 55

frea. 110 Midwest, OH (VOR) 16182N 17939E frea. 1129

Mcguire, OH (VOR)

Milwaukee/General Mitchell Fld 1765IN 16572E. alt. 679

16246N 17796E

RWY 7-25 8010 X 150 RWY 1-19 9690 X 200 RWY 1-19 4185 X 150 RWY 6-24 3165 X 100 RWY 13-31 5875 X 150



Milwaukee/Lawrence J. Timmerman

17720N 16530E alt. 745	3	
RWY 15-33	4110 X 75	



Mattoon (MTO) (VOR)

16158N freq.

16465E 109.4

Moline, IL (VOR) 16965N 15704E 114.4 fren.







alt. 626

RWY 6-24

RWY 0-18

6500 X 150

3205 X 100

2860 X 55

2375 X 35



RWY 18-36 2900 X 60

12025N 1657IE alt. 745 RWY 13-31 RWY 5-23

New Lenox-Howell



16512N 17412E 114.4 freq.

alt. 590

alt. 587

Muncie (VOR)

Newton, IA (VOR) 17194N 14919E



Muncie/Delaware Co-Johnson Fld (F) 16514N 17411E

freq. 1125 Nodine, MN (VOR)



alt 938 RWY 14-32 6500 X 150 RWY 2-20 4200 X 100

18089N 15469E freq. 117.9

Northbrook, IL (VOR) 1734IN 16557E

frea.

Oshkosh, WI (VOR) 18097N 16365E freq. 111.8

Oshkosh/Wittman Field (OSH) (F)

18093N 16364E alt. 804



Ottumwa, IA (VOR)

16855N 15153E 111.6



Pal-Wankee

17294N 16575E alt. 646 RWY 16-34 RWY 6-24 RWY 6-24 3655 X 55



4450 X 55 3230 X 40

Patterson, OH (VOR)

16346N 17848E freq. 115.2





Paxton, II.







frea. 111.2





16576N 16507E RWY 18-36 3405 X 55

alt. 777

Peoria, IL (VOR)



115.2 Peoria/Greater Peoria (PIA) (F)











8005 X 150



freq.









16990N 15541E

1088

frea. Pullman, MI (VOR)

Port City, IA (VOR)

17465N 17141E 112.1 freq.

Racine/Horlick-Racine WI

17569N 16601E alt. 672

RWY 4-22 RWY 14-32

Richmond (RID) (VOR) 16306N 17605E

freq. 110.6 Roberts, IL (VOR)

> 16637N 16500E freq. 1168

Robinson, IL (VOR)

15963N 16679E frea.

108.4

6555 X 100

4825 X 100

Rockford, IL (VOR)

Rockford/Greater Rockford (RFD) (F)

RWY 6-24 RWY 12-30 RWY 0-18

Rochester, MN (F)

18084N 15143E

17342N 16164E 110.8 freq.

17328N 16199E alt. 735

7530 X 150

5195 X 150

5000 X 150

4100 X 100

8200 X 150

alt. 1319

RWY 13-31

RWY 2-20

Rosewood, OH (VOR) 16549N 17842E 117.5 freq.

Sanger (Monee)

16980N 16646E alt. 784

RWY 9-27

RWY 5-23

2385 X 35 2305 X 35



frea. 112 South Bend (VOR) 17157N 17089E 115.4 South Bend/Michiana Reg. (F) 17129N 17090E alt. 790 RWY 9-27 RWY 6-24 RWY 18-36 Springfield, OH (VOR)

> 16358N 17916E frea. 113.2

Sheboygan Co. Mem. WI

alt. 748

Sheboygan, WI (NDB) 17998N

> freq. 254

Shelbyville, IN (VOR)

RWY 13-31

RWY 3-21

18001N 16580E







St. Louis (STL) (VOR) 15894N 15729E 117.4 freq. Terre Haute, IN (VOR) 16168N 16809E freq. 115.3 Timmerman, WI (VOR)

17720N 16529E freq. Troy, IL (VOR) 15840N freq. 116

Vandalia (VLA) (VOR) 15992N 16173E freq. 114.3 Veals (NDB) 16369N 16496E

407 freq.

26 · CHICAGO Waterloo Muni (ALO)

alt. 872 RWY 6-24 5405 X 150 RWY 18-36 5405 X 150

RWY 12:30 8405 X 150
Waterloo, IA (VOR)

17506N 15151E.

17506N 15152E freq. 112.2

Waukesha Co. WI

17689N 16468E alt. 932

RWY 10-28 4200 X 100 RWY 18-36 3605 X 75

Waukon, IA (VOR) 17817N 15439E freq. 116.6

White Cloud, MI (VOR)

17948N 17251E

freq. 117.6

Wolf Lake, IN (VOR)

16946N 17351E freq. 110.4

AIRPORT	DIRECTO	RY - CHICAGO AREA CHART	CHICAGO AREA CHART
CITY AIRPORT	т	NORTH EAST ALTRUE, ILS ATIS VASI	SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Benton Harbor Benton He Bloomington Cedar Repids Cedar Rapids Champeign Frasca Fid	ton-Normal upids Muni (CID) d L-Willard (CMI) at (ORD) Meigs	17152 18393 705 17402 17418 954 110.5/23 127.25 31,5 17311 17046 643 16993 16246 676 17209 15355 863 1 16448 1642 73c 16400 16465 754 109.1/32 124.95 22,32 17244 16578 666 109.7/14 135.15 14R,32L 17188 16571 590 121.3 17156 16528 620 111.5/4R 128.05 4R.22L,4L,22R,	NODINE LA CROSSE NODINE LA CROSSE LA CROSSE LA CROSSE LA CROSSE SHEBOYGAN SHEBOYGA
Frankfort Galeeburg Galeeb	(Plantleid) Munt uniac Coe Munt (Beer Field) (F) (It) Init (GRR) hicego (Blue Island) Munt Munt Munt Munt Munt Munt Munt Munt	17247 18515 794 13R,31L,31L,31R 1718 16502 689 16471 16885 692 17213 16466 758 17442 15684 1078 17140 17192 777 18004 16382 810	WATERLOO MINN DUBLOUE MUNI D
		LEGEND	PEORIA ROBERTIB ROBERTIB
er o		ivil-Public use airport	BURLINGTON 118.8 BOILER BOILER 118.8 KOKOMO MUNIN
8	R- h:	estricted/Private-Nonpublic use airport, aving emergency use or landmark value	BLOOMINGTON-NO PMAL GIBSON CITY PAXTON BLOOMINGTON, IL BLOOMINGTON, IL BLOOMINGTON, IL BLOOMINGTON, IL
SANTA MONICA ATIS 119.15 175-50 NAME FREOUENCY °	A A E	otating light in operation, sunset to sunrise virport Name dvisory Frequency (if available) levation (feet) — Length (hundreds of feet) OR	TITLO DELAWARE COJOHNSON FLD DELAWARE COJOHNS
NAME FREOUENCY S		ORTAC (Distance Measuring Equipment Able)	Scenario disk This is the rest. North and east coordinates are canted at O' (clockwise) to compensate for orthogonal coordinate for orthogonal coordinate or orthogonal coordinate ord overlaid on Lambert conformal conic projection No. 8, 10 + 12.
FREOUENCY	V	OR/DME	San Francisco Nr. 8, 10 + 12. Statute Miles 0 10 20 30 40 50
NAME FREQUENCY O	Nı	nn Directional Beacon	Mawaii Japan Statute Miles 0 10 20 30 40 50 Nautical Miles 0 10 20 30 40 50

Appleton (APE) (VOR) 16507N 18293E

CINCINNATI - 1

Ashland - Boyd County, KY (128) 15812N 18298E

alt. 544 RWY 10-28 5605 X 100

Azalea Park (AZS), VA (NDB)

freg. 116.7

15726N 19747E freq. 336

Beckley (BKW) (VOR)

15529N 18874E freq. 117.7

Beckley, Raleigh County Memorial (BKW)

1553IN 18874E

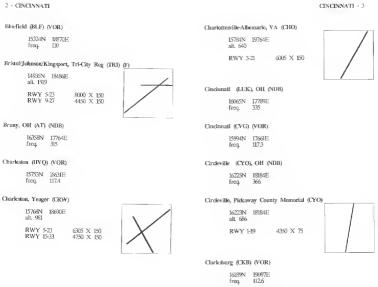
alt 2503

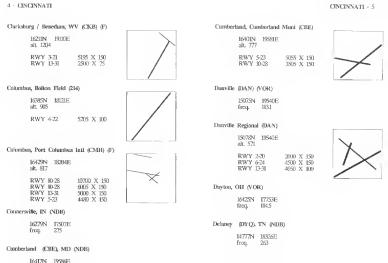
RWY 1-19 6750 X 150

RWY 10-28 5000 X 100

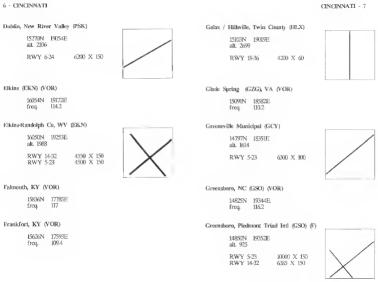
16500N 18883F. freq. 117,1

Bellaire (AIR) (VOR)





freq. 317







15589N 19118E alt. 2303 RWY 4-22

Lexington (HYK), KY (VOR) 15546N 17763E 112.6

frea.

Liberty (LIB), NC (VOR)

Livingston (LVT) (VOR)

14724N 19485E freg. 113

14937N 17555E 108.4 freq.

7010 X 150

1164 freq.

Lewisburg, Greenbrian Valley (LWB)



CINCINNATI - 9

Huntington, Tri-State / Walker-Long Field (HTS) 15738N 18367E. alt. 827 RWY 12-30 6510 X 150 RWY 3-21

3005 X 60

15751N 1833HE 226

108.2

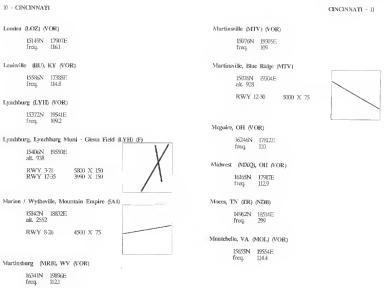
8 - CINCINNATI

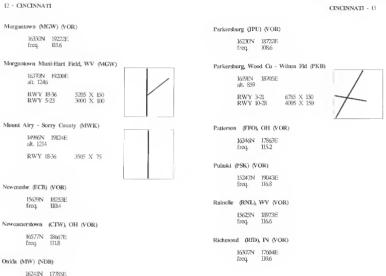
Huntt, WV (HT) (NDB)

freq.

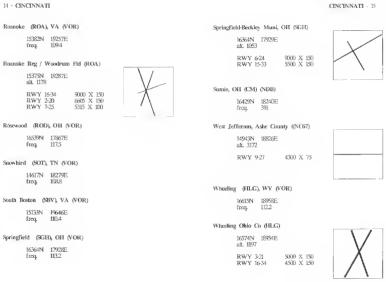
frea

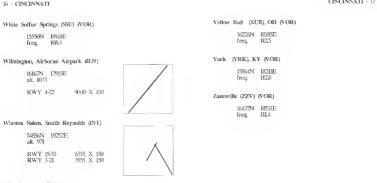
Indianhead (IHD) (VOR) 16533N 19367E





freq.





CINCINNATI - 17



15147N 18423E alt. 2680 RWY 6-24

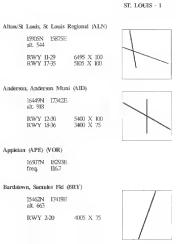
4705 X 100

Woodrum (ODR) (VOR) 15374N

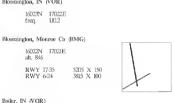
freq.

19285E 114.9

AIRPORT DIRECTORY - CINCINNATI AREA				CINCINNATI AREA CHART		
CITY	AIRPORT	NORTH E	AST ALT	SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.		
Ashland Beckley Bristol/Johnson/Kingspor Cherleston Charlottesville Citriceville Citriceville Columbus Columbus Columbus Columbus Elkins Gelax/Hillsville Greensboro Hot Springs Huntington Lewisburg Lynchburg Marion/Wytheville Martinsville Morgantown Mount Airy Parkersburg Roanoke Springfield West Jefferson Wheeling Wilmington Winston Salem Wise	Boyd Co., KY (I28) Raleigh County Mem. (BKW) 1 Tri-City Reg (TRI) Yeager (CRW) Albemarle, VA (CHO) Pickaway County Mem. (CYO) Benedum, WV (CKB) Botton Field (214) Port Columbus Inti (CMH) Cumberland Muni (CBE) Danville Regional (DAN) New River Valley (PSK) Randolph Co., WV (EKN) Twin County (HLX) Greenville Municipie (GCY) Piedmont Triad Inti (GSO) Ingalls Field, VA (HSP) Tri-Stete/Welker-Long Fid. (HTS Greenbriar Velley (LWB) Lynchburg Municipien Fid. (LYI Mountain Empire (SA1) Blue Ridge (MTV) Muni-Hert Field, WV (MGW) Surry County (MWK) Wood County/Wilson Fid. (PKB) Reg./Woodrum Fid. (ROA) Beckley Muni, OH (SGH) Ashe County (MC67) Ohio County (HLG) Airborne Airpark (ILN) Smith Reynolds (INT) Lonesome Pine	15531 11 14935 18 14935 18 15788 18 15784 11 16223 16 16223 16 162429 18 16401 18 15078 18 15270 18 15270 18 15078 18 15778 18 15778 18 15778 18 15788 18 15142 18 15142 18 15142 18 15142 18 15142 18 15375 19 16370 19 14986 18 15375 19 16364 17 14986 18 15375 18 16374 18 16574 18 16574 18 16574 18 16574 18	1298 544 1874 2503 1486 1519 1690 981 1764 640 1710 1204 1711 905 1204 817 1777 1540 571 1640 571 1640 3792 1614 1753 938 1754 925 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1777 1758 1758 1757 1758 1758 1757 1758 1758 1757 1758	NEWCOMERSTOWN O WHEELING HILL APPLETON HILL		
	LEGENE			WALKER-LONG FLO RANKLEF WHITE SULFUR SPRINGS WHITE SULFUR SPRINGS		
27 4 0	LEGEND Civil-Public use sirpo			NEWCOMBE 110.4 10.4 336 ILEXINGTON RALEIGH COUNTY GREENBRIAR VALLEY. LICENTRICAL STREET COUNTY GREENBRIAR VALLEY.		
9	Restricted/Private-No	npublic use		MEMORIAL BECKLEY MONTEBELLO 114.4		
\$	Rotating light in ope	ration, sunse	to sunrise			
SANTA MONICA ATIS 119.15 175-50	Airport Name Advisory Frequency Elevation (feet) — Le		eds of feet)	BLUEFIELD WOODRUM 114.9 ROANOKE 109.4 LYNCHBURG MUNI- 116.8 ROANOKE REG/ WOODRUM FIELD LYNCHBURG 109.2 LYNCHBURG 109.2		
NAME FREQUENCY °	VOR			[LONDON] MOUNTAIN EMPIRE		
NAME FREOUENCY ♥	VORTAC (Distance M	leasuring Equ	ripment Able	THE TOTAL TO		
NAME FREOUENCY	VOR/DME			BRISTOL DANVILLE REGIONAL OANVILLE REGIONAL OANVILLE REGIONAL 113.1		
NAME FREOUENCY 0	Non Directional Beac	on		HOLSTONAITN SURRY COUNTY SURRY		
VOR/DME NAME FREOUENCY	If VOR falls directly on symbol will be shown shown at the top of the	The VOR faci		DELANEY 263 DELANEY 263 DELANEY 263		
AIRPORT NAME ABBREVIATIONS				KNOXVILLE 118.4		
CO FLD	County Field			North and east coordinates are canted et Statute Miles 0 10 20 30 40 50		
INTL MUNI	. International Municipel			+ 4" (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection Nautical Miles 0 10 20 30 40 50		
(PVT)	Private Airport (prior p	ermission be	fore landing)	Ionnal conic projection readileal miles 0 10 20 30 40 30		



ST. LOUIS - 3 2 - ST. LOUIS Bedford, Virgil I Grissom Muni (BFR) Bowling Green - Warren County (BWG) 15894N 17084E 15085N 17118E alt. 728 alt. 548 RWY 13-31 4500 X 100 RWY 3-21 6500 X 150 3105 X 75 3955 X 150 RWY 6-24 RWY 12-30 Bowman, KY (VOR) Bloomington, IL (VOR) 15641N 17355E 16593N 16242E 112.2 freq. 108.2 freq. Bruny, OH (AT) (NDB) Bloomington, IN (VOR) 16023N 17022E 16353N 17765E 110.2 freq. 315 freq.



16632N 16852E

freq. 115.6

Bowling Green (BWG) (VOR)

15070N 17110F

freq. 1179

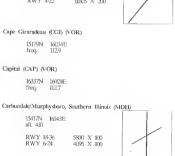


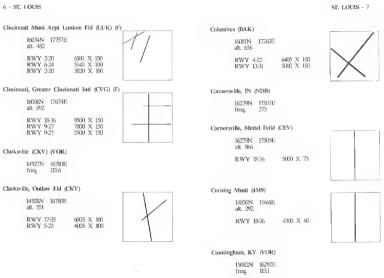
Burlington, IA (VOR)



15994N 17661E

freq. 117.3





RWY 6-24 9500 X 150 RWY 18-36 7000 X 150 7000 X 150 RWY 6-24

Dayton, OH (VOR) 16427N 17731E 114.5

freq.

Decatur (DEC) 16310N 16267E alt. 679 RWY 6-24 RWY 12-30

RWY 18-36

6495 X 150 5300 X 150 5300 X 150





RWY 11-29 RWY 1-19

4500 X 75 3400 X 60



Elizabethtown (EKX) 15404N 17276E alt. 774

RWY 5-23







Galesburg, IL (VOR)

Ft Knox, Godman AAF 1549IN 17259E alt. 754

5000 X 150 5205 X 150



15819N 15563E freq.

15378N 15807E

Farmington, MO (VOR)

freq. 115.7 Foristell, MO (FTZ) (VOR)

freg.

110.8

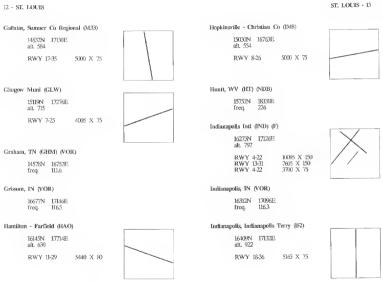
Fort Knox, KY (VOR)

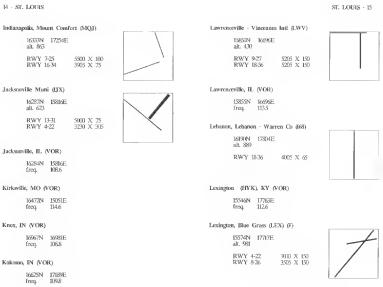
15491N

17258E 109.6

1679IN 15760E freq.

109.8







Livingston (LVT) 14862N 17506E alt. 1371

RWY 3-21

London (LOZ) (VOR) 15149N 17907E 116.1 freq.

London - Corbin Arpt - Magee Fld (LOZ)

15173N 17919E alt. 1214

RWY 5-23

RWY 1-19

RWY 14-32

Louisville, Bowman Fld (LOU)

15640N 17355E alt. 548 RWY 6-24

4310 X 80 3380 X 100 3535 X 80

6005 X 150

4005 X 75

RWY 5-23 Malden Muni (MAW)

15586N 17388E

alt. 495

Madisonville Muni (210)

alt. 440

RWY 1-19

RWY 11-29

15243N 16776E

Louisville, Standiford Fld (SDF) (F)

15618N 17331E.

freq. 114.8

14915N 15888E. alt 259

RWY 4-22 RWY 13-31

RWY 18-36

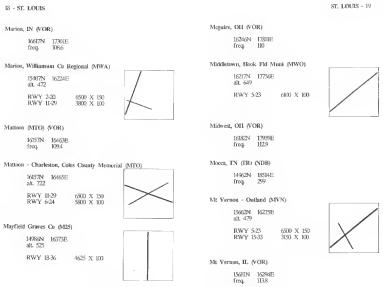


freq.

10000 X 150

7250 X 150





108.2 New Hope, KY (EWO) (VOR) 15386N 17373E Nabb, IN (VOR) freq.

15792N 17343E freq. 1124 Onida (MW) (NDB)

16216N 17734E Nashville (BNA) (VOR) freq. 14716N 17038E

freq. 114.1 Nashville, John C. Tune (IWN)

14740N 16973E alt 492 RWY 1-19 5000 X 100

223

Ottumwa, IA (VOR)

16855N 15153E

freq. 111.6

110.8

Owensboro - Daviess Co (OWB)

15410N 16852E

alt. 407

RWY 17-35

6500 X 150 3700 X 100



ST. LOUIS - 21

15411N 16852E

frea. 108.6

Owensboro, KY (OWB) (VOR)

RWY 5-23

Paducah, Barkley Regional (PAH) Pontiac, IL (VOR) 15111N 16307E 16742N 16316E alt 410 109.6 frea. RWY 4-22 6500 X 150 RWY 14-32 4005 X 150 Poplar Bluff, Earl Fields Mem (POF) 14990N 15774E alt. 331 Patterson, OH (FFO) (VOR) RWV 18-36 4005 X 100 16345N 17863E 1152 freq.

Proria, IL (VOR) 16676N 15965F freq. Peotone, IL (VOR) 16037N 16618E freq. 113.2 Perryville (K02)

5500 X 100



frea.

Richmond (RID) (VOR)

Richmond Muni (RID)

16307N 17605E

110.6 freq.





ST. LOUIS - 23

Pocket City, IN (PXV) (VOR)

15455N 15936E alt. 371

RWY 1-19

freq.

22 - ST. LOUIS

15491N

16648E 113.3



RWY 17-35 Robinson, IL (VOR)

RWY 9-27

5100 X 75

3400 X 75



15963N 16679E freq. 1084

Rosewood, OH (VOR)

16549N 17842E freq.

Samsville, IL (VOR) 15732N 16529E.

freq. 116.6

Scott AFB

15755N 15940E

alt. 453 RWY 14-32



RWY 4-22 RWY 13-31 RWY 18-36

Shelbyville, IN (VOR) 16240N 17280E freg. 112

15937N 17259E

5500 X 150

5500 X 150

1000 X 150

5500 X 100

alt. 584

Sikeston Memorial Muni (SIK)

15038N 16037E alt. 315

RWY 2-20



Smyrna (MOY)

14673N 17096E

alt. 544

RWY 14-32 8035 X 150 5545 X 150 RWY 149







ST. LOUIS - 27 26 - ST. LOUIS

Springfield, Capital (SPI) 16314N 16002E

alt. 597 RWY 4-22

8000 X 150 5300 X 150 RWY 12-30 RWY 18-36 5300 X 150

Springfield, OH (VOR) 16358N 17916E.

113.2 freq.

Springfield-Beckley Muni, OH (SGH)

16364N 17929E alt. 1073 RWY 7-25 5000 X 75 RWY 4-22 9000 X 150

St Louis, Lambert - St Louis Intl (STL) (F)

15844N 15773E alt. 604 RWY 12-30 11020 X 200 RWY 12-30 9000 X 150 RWY 6-24 7605 X 150 RWY 17-35 3015 X 75



15811N 15674E alt. 462 RWY 8-26 RWY 8-26

St Louis, Spirit of St Louis (SUS)

7000 X 150

3800 X 75

9020 X 150

5300 X 150

St. Louis (STL) (VOR)



15894N 15729E freq.

Sumie, OH (CM) (NDB)

16432N 18243E frea. 391

Terre Haute, Hulman Regional (HUF) 16152N 16791E

alt. 584 RWY 5-23

RWY 13-31





Terre Haute, IN (VOR)

freg.

16168N 16809E 1153 freq.

Troy, IL (VOR)

15840N

15920E 116



5000 X 100

Vandalia (VLA) (VOR) 15992N 16173E freq.

1143

Walnut Ridge (ARG) (VOR)

14706N 15554E freq. 114.5

Walnut Ridge Regional (ARG) 147IIN 15563E





14708N 1667IE alt. 745 RWY 3-21



freq. Wright-Patterson AFB

Wolf Lake, IN (VOR)

16348N 17867E alt. 823

16946N 17351E

110.4

RWY 5-23

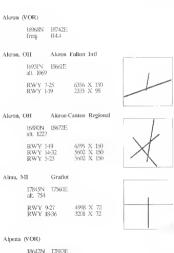
RWY 5-23

4750 X 150

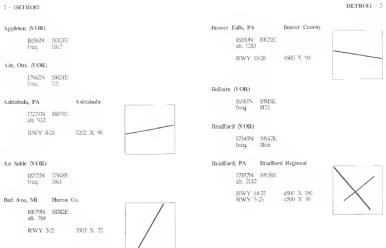


AIRPORT DIRECT	TORY - ST LOUIS AREA CHART	ST LOUIS AREA CHART
CITY AIRPORT	NORTH EAST ALTINE ILS ATIS VASI	SCENERY DISK REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Atton/Si Louis St Louis Regional (ALN) Anderson Muni (AID) Berdstown Service Hig (BPY) Bedford Strutter Hig (BPY) Bedford Strutte	15755 15940 453 16022 17021 845 15085 17118 548 ks (CPS) 15771 15833 413	CHAMPAIGN STRINGFIELD 1110. INDIANABOLIS TERRY 1110.
Cincinnati Curken Field Greater Cincinnati Intl (CV Outlaw Fd (CKV) Corners/Greater Courts Fd (CKV) Corning Muni (4M9) Dayton Dayton Dayton General Aprix South Dayton Desatur	14928 16780 551 16277 17509 888 14830 18585 292 1th (MGY) 16247 17812 925 1(DAY) 16277 17812 925 1(DAY) 16378 17805 961 14534 16287 679 14654 16089 338 15] 14544 16089 338 15] 15] 15] 15] 15] 15] 15] 15] 15] 15]	JACKSONVILE MUNI JACKSONVILE MUNI JACKSONVILE MUNI JACKSONVILE MUNI JACKSONVILE MUNI JACKSONVILE MUNI JACKSONVILE J
Charleston Mayfield Mayfield Graves Co. (M25) Middletown Mt Vernon Nashville Nashville Overseboro Paducah Parnyville Popiar Bithi Richmond Robinson	19217 17756 849 19862 16275 479 14740 16973 492 VA) 14718 17039 600 * 109.9/2L 120.0 13.20R.2R.20L 15410 16982 407 15411 18307 410 15455 18306 371 14990 17704 331 18090 17704 311 18090 17704 1141 18663 16860 462 19937 17259 584 15038 16037 315 14673 17096 544 16314 16002 597 18384 17929 1073 .) 18844 15773 604 * 111.9/30R 12L.30R 15811 16237 341 14611 16237 341 14611 16237 341	FARMINGTON REG CAPE GIRRARDEAU MUNI CAPE GIRRARDEAU MUNI CAPE GIRRARDEAU CUININGHAM 112.9 CAPE GIRRARDEAU CUININGHAM 112.9 CAPE GIRRARDEAU CUININGHAM 113.1 GRAVES CO CUININGHAM 113.1 COUTLAW FLD COUTLAW FLD COUTLAW FLD COUTLAW FLD COUTLAW FLD CUININGSTON
	LEGEND	CORNING MUNI MALDEN MUNI (CORNING MUNI MALDEN MUNI MANDEN MUNI MANDEN MUNI MAN
Civil-Public use airport Restricted/Private-Nonpublic use airport, having emergency use or landmark value		WALNUT RIDGE REG JOHN C. TUNE JOHN C. TUNE
SANTA MONICA ATIS 119.15 175-50	Rotating light in operation, sunset to sunrise Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	WALNUT RIDGE 114.5 DYERSBURG MUNI DYERSBURG 118.8 Statute Miles 0 10 20 30 40 50
NAME FREQUENCY °	VOR	16 T T T T T Neutical Miles 0 10 20 30 40 50

DETROFF - 1



freq. 108.8



Brantford, ONT Brantford Carlisle, PA Carlisle 16723N 20104E 17870N 1893LE alt. 813 alt 515 RWY 10-28 4008 X 39 RWY 5-23 4998 X 98

RWY 11-29 2597 X 98 RWY 11-29 2597 X 98 2597 X 98 RWY 17-35 RWY 17-35 2597 X 98 RWY 5-23 2459 X 98 Bryan, OH William Co. 17046N 17660E alt 731

5005 X 72

RWY 4-22

Centralia, ONT

Clarion (VOR)

17133N 18571E

17897N 18558E alt. 823

RWY 10-28

RWY 16-34

17043N

alt. 584

RWY 6-24 RWY 6-24

freq.

Cleveland, OH

19309E

Burke Lakefront

Huron Airpark

5011 X 150

4401 X 150 3201 X 150

DETROIT - 5

17839N 19478E 116.4 freq. Buffalo, NY Greater Buffalo Intl 1784IN 19450E

RWY 7-25

alt 725 RWY 5-23

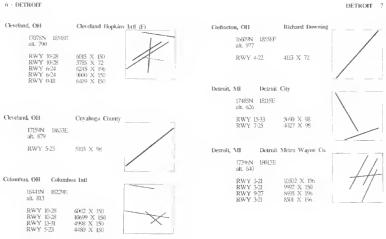
RWY 14-32

Buffalo (VOR)

4 - DETROIT







Detroit, MI Willow Run Elmira (VOR) 17548N 20039E 17398N 17954E frec. alt 715

8 - DETROIT

DETROIT - 9

RWY 5-23 7524 X 150 Elmira, NY Corning Regional RWY 5-23 6658 X 157 7294 X 157 RWY 9-27 17583N 20081E RWY 9-27 6514 X 157 alt. 954 RWY 14-32 6914 X 157 RWY 6-24 6999 X 150 RWY 10-28 5195 X 150

Dryer (VOR) Erie (VOR) 17049N 18423E 17387N 18999E. freq. 113.6 110.8 freq

Du Bois PA Du Bois-Jefferson County Eric, PA Eric Inti

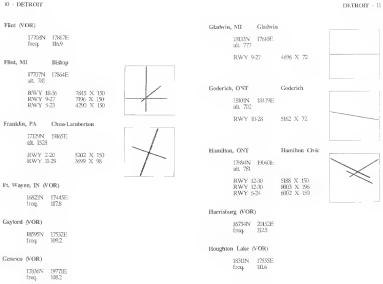
17079N 19487E 17422N 19030E. alt. 1817 alt. 731 RWY 7-25 5503 X 98 RWY 6-24 6500 X 150

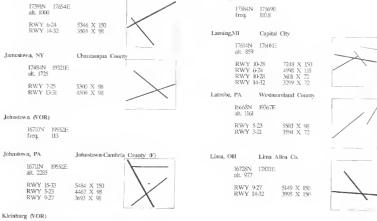
3601 X 150 RWY 10-28 RWY 2-20 3529 X 150

Dunkirk, NY Dunkirk Muni Findlay, OH Findlay 17630N 19300E

16863N 17942E alt. 692 alt. 813 RWY 6-24 4998 X 98 RWY 7-25 RWY 15-33 4001 X 98 6002 X 98 6002 X 98

RWY 18-36





18235N 19108E

freq. 114.5

LORIGON, CEVI LORIGON		Meadville, PA	Port Meadvine
17902N 18683E alt. 912		17227N 19041E alt. 1404	
RWY 15-33 RWY 9-27 RWY 5-23	8796 X 196 6297 X 196 3175 X 150	RWY 7-25	4099 X 72
London, Ont. (VOR)		Midland (VOR)	
1780IN 18683E freq. 117.2		18517N 19056E freq. 112.8	
Mansfield, OH	Manstield Lahm Muni.	Montour (VOR)	
16811N 18321E alt 1296		16735N 19100E freq. 112	
RWY 14-32 RWY 5-23	9000 X 150 6796 X 150	Mt. Pleasant, MI 17975N 17536E	Mt, Pleasant
Marlette, MI Marlette		alt. 754	
17875N 18064E alt. 895		RWY 9-27	4998 X 98
RWY 9-27 RWY 1-19	3796 X 72 3503 X 72	Niagara Falls, NY	Niagara Falls Intl
		17905N 19374E alt. 590	-
		RWY 10-28	9124 X 150

Oshawa, ONT Oshawa

alt. 459

RWY 8-26

RWY 12-30

RWY 13-31

RWY 5-23

18256N 19351E

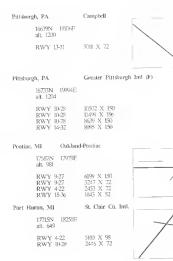


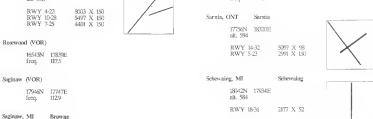
3824 X 98

2532 X 98

2650 X 150







17908N 17819E alt 600 RWY 9-27

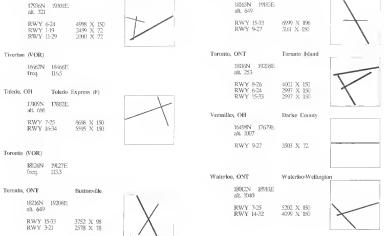
RWY 5-23

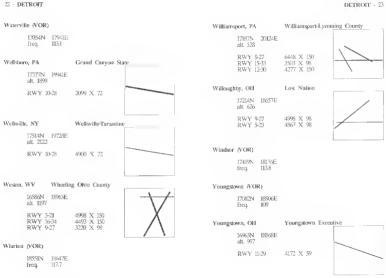
3503 X 72

St. Catharines, ONT St. Catharines Toronto, ONT Downsview

20 - DETROIT

DETROIT - 21

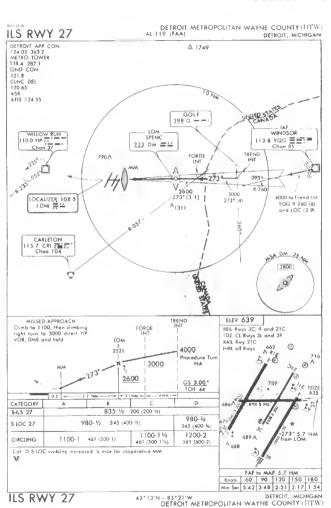




24 - DETROIT Youngstown, OH Youngstown Muni.







AIRPO	ORT DIRECTORY	- DET	ROIT AR	EA	DETROIT AREA CHART
	AIRPORT	NORTH	EAST ALT	(Fuel) (Rwy/Fred)	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION. ,
CITY Akron, OH Bad Axe, MI Beaver Fells, PA Brantford, Ont. Bryan, OH Buffalo, NY Carlisle, PA Centralia, Ont. Cleveland, OH Filint, MI Franklin, PA Gladwin, MI Goderich, Ont. Hamilton, Ont. Jackson, MI Jamestown, NY Johnstown, PA Lansing, MI Latrobe, PA Lima, OH London, Ont. Mansfield, OH Marlette, MI Meadville, PA Mt. Pleasant, MI Nlagara Falls, NY Noshawa, Ont. Nansfield, OH Marlette, MI Meadville, PA Attistburgh, PA Pittsburgh, PA Pi	Akron Fulton Intl Akron-Canton Regional Gratiot Ashtabula Huron Co Beaver Co Bradford Regional Brantford William Co Greeter Buffalo Int'l Carlisle Huron Airpark Burke Lakefront Cleveland Hopkins Intl Cuyahoga Co Columbus Intl Richard Downing Detroit City Detroit Metro Wayne Co Willow Run Du Bois-Jefferson Co Dunkirk Muni Corning Regional Erie Intl Findlay Bishop Chess-Lamberton Gladwin Goderich Hamilton Civic Jackson Co. Reynolds Chautauqua Co Johnstown-Cembria Co Capital City Westmoreland Co Lima Allen Co London Mansfield Lahm Muni Marlette Port Meedville Mt. Pleasant Niagara Falls Int'l Oshawa Mid-State Allegheny Co Campbell Greater Pittsburg Intl Dakland-Pontiec St. Cleir Co. Intl Portland Munl Portland Munl Portland Munl Cochester-Monroe Co Tri City	NORTH 16931 16880 17845 17274 18079 16850 17357 17870 17946 17871 16723 17887 17133 17078 17153 17078 17153 17482 16863 17707 17129 18133 18101 17894 17391 17484 17391 17484 17391 17484 17391 17487 17487 17597 17497 17597	BAST ALT	[F ILS [Fuel (Now) Freq]	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION. ILLEINBURG ILLS ILLEINBURG ILLS ILL
Port Huron, MI S Portland, IN P Rochester, NY Saginaw, MI S Samia, Ont. S Sebewaing, MI S St. Catharines, Ont. S Toledo, OH T Toronto, Ont. T Toronto, Ont. T Versailles, OH D Waterloo, Oht. U Waterloo, Ont. ON	St. Cleir Co. Inti Portland Munl Rochester-Monroe Co Tri City Sarnia Sebewaing	17715 16601 17960 17948 17756 18042 17936 17109 18216 18165 18116 16498 18012	18251 649 17522 925 19774 558		DARKE CO ITVERTON WHEELING OHO CO TOUMBUS INT'L ROSEWOOD 116.5 TIVERTON WHEELING OHO CO MONTOUR 112.5 WESTMORELAND CO TOURNSTOWN 113.0 Nautical Miles 0 10 20 30 40 50
Wellsville, NY Weston, WV Willamsport, PA Willoughby, OH Youngstown, OH Y	Wellsville-Tarantine Wheeling Ohio Co Wmsport-Lycoming Co Lost Nation Youngstown Executive Youngstown Muni	17514 16586 17187 17214 16963	19728 2122 18963 1197 20124 528 18657 626 16668 997 18908 1197		North and east coordinates are canted at + 5° (clockwise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.

18642N 17887E freq. 108.8 Aloena, MI 18639N 17885E. alt. 689

Alpena (VOR)

Ash. Ont. (VOR)

RWY 1-19 9000 X 150 RWY 7-25 5031 X 150 RWY 13-31 5031 X 150

17962N 19024E

freq. 115 Au Sable (VOR) 1837IN 17948E frea 116.1

Coehill (VOR)

18617N 19636E

freq. 115.1 Earlton, Ont. 19858N 18902E

alt. 797

RWY 7-25 6002 X 150

Earliton

Phelos Collins

RWY 9-27 4998 X 98 RWY 0-18 2997 X 72

Gladwin, MI

Gladwin

RWY 9-27 4696 X 72

18133N 17610E

alt. 777

Kleinburg (VOR) freg.

18235N 19108E 114.5 London, Ont. (VOR) 17801N 18683E

> 19056E 112.8 freq.

freg. 117.2 Manitoulin, Ont.

Gore Bay 19008N 18163E alt. 636

Houghton Lake (VOR) RWY 11-29 4900 X 98 18311N 17555E

111.6 freq. Midland (VOR) North Bay (VOR)



alt. 1214 RWY 8-26 9997 X 196

RWY [3-3] 6002 X 150 RWY 18-36 4473 X 150

Oscoda, MI Wurtsmith AFB

18374N 17949E

alt. 626 RWY 6-24 11801 X 301

Peck (VOR)

17855N 18182E freq. 114 Pellston (VOR)

18863N 17534E freq. 111.8

Pembroke, Ont. Pembroke

RWY 17-35 4998 X 98 Saginaw (VOR)

17946N 17747E 1129 freq. Sault Ste Marie, MI Sault Saint Marie

alt. 715

19236N 17605E

RWY 14-32

Pellston, MI Emmet Co

RWY 14-32 6514 X 150 RWY 5-23 5392 X 150

18836N 17493E

19159N 19761E.

alt. 528

alt. 722

4001 X 98

6 - LAKE HURON

Sault Ste Marie, Ont. Sault Ste Marie 19232N 17564E alt. 1689 RWY 4-22 6002 X 196

RWY 11-29 6002 X 196

Saulte Ste Marie, MI Chippewa Co Intl

RWY 16-34 7202 X 196

18506N 19703E

Sudbury (VOR) 19371N 18666E freq. 112.3

19132N 17583E

alt. 800

Stirling (VOR)

freq.

Sudbury (F)

Sudbury, Out.

19368N 18667E alt. 1141 RWY 4-22 6599 X 196 RWY 12-30

4998 X 196

Val D' Or (VOR)

Toronto (VOR)

20127N 19468E 113.7 freq. Val D' Or, Oue, Val D' Or (F) 20077N 19483E

18126N 19127E

freq. 113.5

alt. 1105 RWY 0-18 9997 X 196

alt. 728

Wiarton (VOR) 18551N 18647E freq.

Wiarton, Ont. Wiarton 18550N 18645E RWY 5-23 4919 X 150







LAKE HURON - 7

Amdi Z PITTSBURGH/GREATER PITTSBURGH INTL (PIT) ILS RWY 28L AL-570 (FAA) PITTSBURGH, PENNSYLVANIA PITTSBURGH APP CON 123 95 360 8 PITTSBURGH TOWER 119 1 236 6 GND CON 121 9 348 6 CLNC DEL 126 75 ASR ATIS 12725 LOCALIZER 108 9 1 I- PES PHITZ 1277 86 84 MONTOUR HALIN INT 4000 to 112.0 MMJ== MAJ 10 1 DME 4000 to GS intercept Halin Int Chan 57 MAU 10.1 DME 3000 LOC only 098° (10 1) 3100 ALLEGHENY 110 0 AGC Chan 37 Simultaneous gagroach authorized with Rwy 28R HAUN INT ELEV 1203 Rwy 28C ldg 8049' PITT 7 MMJ TO LOME OM, INT MISSED APPROACH Climb to 1800 then climbing left turn 279" 5 NM 2801 to 4000 an 180° heading then direct One Minute Halding Pottern from DM/Int AGC VORTAC and hold 0999-4000 PAFI 1298 <--279° TOZE 10502 # 150 .279% 4000 1136 30001 *3000 when 1249 **TLOC** only thorized by ATC 3 9 NM D CATEGORY 1326/20 1326/24 S ILS 281 1326/18 200 (200 %) 11 500 × 200 200 (200 %) 200 (200-15) 1620/60 1620/40 1620/50 1620/24 494 (500 %) S LOC 28L 494 (500 %) 494 (500 T) 494 (500-1%) 1620-11/2 SIDESTER TDZ · CL Rwys TOL and 281 1620-2 484 (500 2) 1620/50 484 (500 H RWY 280 484 (500-11/2 HIRL Rwys 10L 28R, 10C 28C 1700 11/2 10R 28L and 14-32 1760 2 557 (600 2) 1700-1 497 (500 l) CIRCLING 497 (500-11/2 FAF to MAP 5 NM
Knots 60 90 120 150 180
Mrt Sec 5 00 3 20 2.30 2 00 T 40 Call E, S LOC 28L, increase visibility 15 mile for inoperative MALSR PITTSBURGH, PENNSYLVANIA ILS RWY 28L 40 29 N 80" 14 W

PITTSBURGH/GREATER PITTSBURGH INTL (PIT)

AIRPORT D	IRECTORY - LAKE HURON AREA	LAKE HUF	RON AREA CHART
	PORT NORTH EAST ALT. F ILS		NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Earlton, Ont. Earlt Gaylord, MI Otse Houghton Laka, MI Rosc Manitoulin, Ont. Gore North Bay, Ont. Nortl Oscoda, MI Wurt Pallston, MI Emm	ago Co 18595 17533 1328 common Co 18311 17557 1151 e Bay 19008 18163 636 h Bay 19295 19085 1214 * tsmith AFB 18374 17949 626 net Co 18836 17493 722 broka 19159 19761 528 t Saint Marie 19236 17605 715 t Ste Mana 19232 17564 1689 pewa Co Intl	Nautical Miles 0 10 20 30 40 50 Statute Miles 0 10 20 30 40 50	PVAL TVAL
Val D' Ór, Que. Val I Wiarton, Ont. Wiar	D'Or 20077 19483 1105 *		VAL D
	North and aast coordinates are cantad at + 5° (clockwise) to compensate for orthogonal coordinate grid overfaid on Lambart conformal conic projection.		EARLTON
	LEGEND		SUDBURY 142.3
£7 4 0	Civil-Public use airport		NORTH BAY
8	Restricted/Private-Nonpublic use airport, having emergency use or landmark value	CALLET OTE MADE	JDBURY Ja 113.4
ψ	Rotating light in operation, sunset to sunrise	a final state of the state of t	NORTH BAY
SANTA MONICA ATIS 119.15 175-50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	CHIPPEWA CO INT'L	The state of the s
NAME FREOUENCY °	VOR	PELISTON 1118 GORE BAY	KILLALOE 115.6
NAME FREOUENCY ♥	VORTAC (Distance Measuring Equipment Able)	EMMET CO	W. W
NAME FREOUENCY	VOR/DME	GAYLORD 109.2	WIARTON SAME
NAME FREOUENCY	Non Directional Beacon	OTSEGO CO PHELPS COLLINS	117.7 WIARTON
NAME FREOUENCY	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.	HOUGHTON LAKE	MIDLAND
AIRPORT NAME ABBRE	EVIATIONS County	WURTSMITH AFB	112.8
FLD INTL	Field International		STIRLING 113.5
MUNI (PVT)	Municipal Private Airport (prior permission before landing)	ROSCOMMON 34:	21
(1 V 1)	+ mate Airport (prior permission before landing)	Comment of the state of the sta	

VAL D' OR 113.7

PEMBROKE

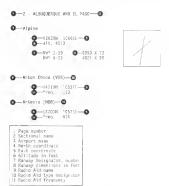
COEHILL 115.1 SubLOGIC Scanery Disks are grouped by aeronautical sectional. Each SD covers a geographical region of the United States, generally comprised of three sectionals:



In addition to twelve regional Scenery Disks a number of STAR Scenery Disks are also available A STAR Scenery Disks cover a small area with a relatively dense amount of scenery These disks are mainly intended for visual flight (sight-seeing). They aroutide buildings and landmarks, as well as defailed renotions of the major arports in the area.

Reading a Sectional Directory

Below is a sample listing from a sectional directory with a description of the information provided. All available airports and radio-nav aids for a given sectional are fisted alphabatically Radio transmitters that border a sectional are also available on neighboring sectionals, so you can cross sectional boundaries when instrument from



Notice that the vertical sides of the airport map align with magnetic north Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional maps VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

U.S. Scenery Disk areas are grouped as follows.

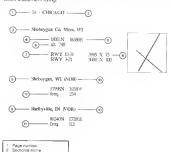


Scenery Disks for other areas of the world are also available. Japan Scenery Disk covers the area from Tokyo to Osaka in great detail "Mostern European Disk covers the area from Tokyo to Osaka in great detail "Mostern European Tour" Scenery Disk provides detailed scenery opvering southern Great Britan, northern France, and southern West Germany, with a set for top Red Square in Mossow 'San Francisco Scenery Disk covers the Bay area in great detail, and is destigned orimany low local areas solthasein.

Scenery Disks are available in 5-1/4" and/or 3-1/2" disk format for most computer systems. Contact SubLOGIC for Information on which scenery areas and disk formats are currently available for your system;

Reading a Sectional Directory

Below is a sample listing from a sectional directory with a description of the information provided. All available amports and radio-nav ands for a given sectional are listed alphabetically Radio transmitters that border a sectional are also available on neighboring sectionals, so you can cross sectional boundaries when Instrument floring.



- 3 Airport name
 4 North coordinate
 5 East coordinate
 6 Alatisude in feet
 7 Hurway Desagnator, number
 8 Rurway dimensions et feet
 9 Badio Aid name
 10 Radio Aid lighe designator
 11 Radio Aid frequency
- Notice that the vertical sides of the airport map align with magnetic north. Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional may's VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

Reading a STAR SD Sectional Directory

This Star SD sectional directory lists all available airports in alphabetical order, followed by all radio-nav aids. Each airport includes a detailed diagram of the airport as it appears on the disk. Airport and radio-nav aid listings are organized as follows.

(Airport Diagram)

(Airport Diagram)

●—Alpine

-12628N 10661E--alt. 4513 -RWY 1 19 -5999 X 72 RWY 5-23 4821 X 39

● Anton Chica (VOR)—

● freq. 110 ● Artes11 (NDB) — ②

13703N 10575E-0 m-freq, 414

1 Page number
2 Sectional mare
3 Arrporl name
4 North coordinate
5 East coordinate
6 Altitude in feet
7 Rumway Dasignator, number
8 Rumway dimensions in feet
9 Radio Aid name
10 Radio Aid type designator
11 Radio And frequency

The vertical sides of each surport diagram align with magnetic north. Magnetic north is the direction you are pointing when your magnetic compass reads 0. Each sectional map's VOR needles point toward magnetic north. The sides of the map align with true north. This is consistent with NOAA sectionals.

Using a Scenery Disk with Flight Simulator II

Load Fight Simulator II in the usual way. When the program has limited fooding metrit the simulating 's program dotor as described in your operating manual sind set the NORTH and EAST Coordinates of the airport you we chosen from the decetory for the region you'd like to explore (set ALTITUDE to). Exist the editor, remove the FSIII disk and insert the appropriate Scenery Disk. Next, press CTRL. E and want for a menu to appear. This menu page lists the names of the sectionals included on the Scenery Disk. Press any key to exit, and you should not yourself at the airport you we selected, if no scenery is vasitia, go into rader mode and zoom out to determine your approximate location. You may be able to zoom at it me way out and view the martie continental United States disables, complies with trivers, highways, coastience, and the Client Lakes. This default disables should be also and the contract of the contract o

When you find you find if at the surport you we selected, it may be a good idea to save your position to a User Mode (see User Mode Library in the FSII Pilot s Operating Handbook). This way, il you crash, you will be returned to the selected erport. Otherwise you will be returned to a presel location (above Lake Michinan) in the default USA database

Crossing a Sectional Boundary

When you if your a sectional boundary, one of two things will cocur. If the neighboring sectional is also included on your Science Posk, that sectional will load and you will have to switch to the appropriate new map and directory provided, it the repipitioning sectionis is not evaluable on your disk, a common cleraturi USA distabase will load. This default distabase allows you to zoom out (in radar mode) to you whe may propagniphical leatures of the United States.

Il you have another Scenery Disk confaining the appropriate sectional, you can switch disks and press CTRL E to log-in the new disk. After a bnet load, the names of the new sectionals available on this disk will be displayed Press any key to exit and return to Flight Simulator III.

IMPORTANT: If you want to change Scenery Disks or go back to the scenery on the FS2 disk, you must log-in the new disk by pressing CTRLE. If you do not log-in the new disk, you will not get the new scenery and you will risk causing a disk load error.

Using a Scenery Disk with Microsoft Flight Simulator (IBM PC Versions)

Load Flight Simulator in the usual way. When you want to switch to a Scenery Disk, remove the Flight Simulator disk and insert the appropriate Scenery Disk. Press CTRL E. This will log-in the disk. A message will appear on the screen identifying the names of the sectional areas contained on the disk.

The first Scenery Disk log in automatically checks to see if you have the most recent viers on of Fight Smulator. I you don't, the program updates Flight Smulator in memory. When this happens, your flight coordinates are set task, to the Chicago area. This will only happen on the list is Scenary Disk log-in-of the season. After the list legion, your flight coordinates and conditions will carry over as you change Scenary Disks which I thing.

After logging in the first Scenery, Disk, you can fly or skew through all of the scenergy of the disk. You can freley exchange Scenery, Disks as you, by five areas. Press CTRL Et log-on the new area when you switch disks. If you fish to log in a new Scenery. Disk effer instanting 1, if will be automatically logical in when the disk is accessed. The log-in message will appear after every manual or automate log.

Using the Microsoft Filght Simulator Disk as a Scenery Disk

The Flight Simulator disk contains all of the usual scenery for the Chicago, Seattle, Los Angeles, and New York areas. You can insert this disk and log it in as you would any other Scenery Disk to fiv in these areas. This applies to Jet as

Special Note for IBM PC Flight Simulator Version 2.0

well as Flight Simulator

Very few copies of Version 2.0 exist. You most fikely have Version 2.1, 2.10, 2.10, 2.10, a talker version of Microsoft Rejish Simulator. Look on the disk label near the serial number area, or look on the first monup age when loading Fight Simulator I you have Version 2.0 insert the Scenery Disk and priese ESC incread of CIFIL E for the list log-in of the assesson Affair fair first flowing the process CIFIL Ess usual to log-in more Scenery Disk and, never the misself the series of the se

Tandy 1000/1200/2000 Flight Simulator

Scenery Disks are compatible with the Tandy 1000/1200/2000 version of Flight Simulator. With this version, always make sure to log-in a new Scenery Disk by pressing CTRL E once the disk has been inserted. No auto-load is available on this version, and tailure to log-in a new disk can cause unpredictable results when the disk is accessed after an unlocad disk chance.

Spacial Note for Compaq 286 Users

The 1 2Mbyte floppy drives in the Compaq Deskpro 286 computer cause diskread errors when using Scenery Disks with SubLOGIC Jet or Microsoft Flight Simulator. Here is the reason why, and how to get around it

PROBLEM: Whenever you remove a disk from the floppy drive by furming the release lever, the diskette prings out of the driver. This garing action figure as switch in the drive that informs the disk read/write software that you have just as which in the drive that informs the disk read/write software that you have just asking the flow of the disk read/write software that you have just asking the disk, and switches to 1.2Myste end mode from whatever mode in happens to be in ...d. Flight Smullator, Scenery Disks (and many other namufacture) programs) are on 380K disks, and a read error results when the Compaq 288 titles to read them as 1.2Myste disks.

You can verify this for yourself using the Microsoft Flight Simulator. Boof the disk, then enter and exit the editor several times (ESC key) just to see that everything is functioning properly. Then pop the disk out of the drive, re-insert it and try to get back into the program editor. You will get a disk read error.

SOLUTION - You can avoid mis problem by trucking the disk drive into thinking that you haven the hanged disk to Do this by holding the disk in place with your linger while releasing the disk-release lever. DON'T LETTHE DISK POP OUT inger while releasing the disk-release lever. DON'T LETTHE DISK POP OUT FOR THE DRIVE. Them manually remove the disk-rail bears at Scenery Disk (or Fleght Smulator as scenery for Jet). The computer will never know that you changed the disk and everything should work fine. Remember: if you changed the disk and everything should work fine. Remember: if you do disk pop fiself out of the drive, the switch will be activated and the drive will go into 1 2Mbyte mode, thus creating errors.

Jet Users

Sceney Disks are compatible with SUBLOGIC, lef Follow the instructions in your left manual for loading a Sceney Disk. Jet has no automatic log in ture, so always make sure you return to the left startup menu page before inserting a new Scenery disk. Changing Scenery Dasks in the model or flight can cause unpredictable results when the disk is accessed after a disk change.

Conclusion

As of this winting there are no fuel or repair facilities available on regular Scenery Disks (although they do occur on STAR Scenery Disks). To refuel, just land at an airport and enter the program editor. Your tanks will be filled and repairs will be made when you exit the editor.

We intend to periodically update and improve our Scenery Disks to include more airports, radio aiks, and scenery defails as recommended by users. If you know of an sirport (or any other defail) that should be included on future versions of these Scenery Oxiss, pleses drops us a line and include the required information CNA SEPARATE SHEET OF PAPER (so we can store it in our files), Here's what we need to know.

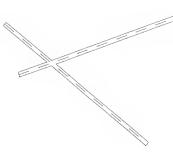
Aimorts: NAME CITY & STATE

LATITUDE, LONGITUDE, & ALTITUDE

HEADING, LENGTH, & WIDTH of each runway Buildings, objects. NAME, CITY, & STATE

LATITUDE LONGITUDE & DIMENSIONS

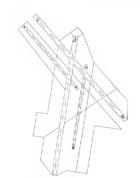
Pictures and postcards are also welcome, especially serial views. If you're unable to delemine the latifud and longitude to the object or arport in question, please provide a description of where the object can be located on a map. All customer correspondence is read and answered (when appropriate). And please remember to include any scenery suggestions or information on a SEPARATE pace of your letter.



Alameda NAS

17402N 5102E alt. 13

> RWY 7-25 7200 X RWY 13-31 8000 X



Concord, Buchanan Fld. (F) 17449N 5214E alt. 23

Antioch 17407N 5295E alt. 185

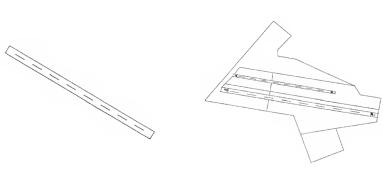
RWY 9-27

2480 X 33

RWY 1L-19R RWY 14L-32R RWY 14R-32L RWY 1R-19L ATIS:

4712 X 150 4601 X 150 2800 X 75 2768 X 75 124.7

6 - 'STAR' SAN FRANCISCO 'STAR' SAN FRANCISCO

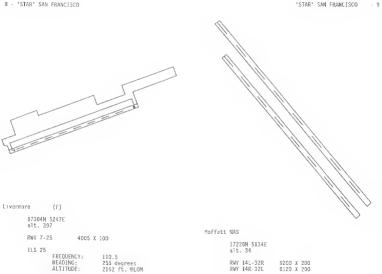


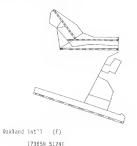
Hamilton Army 17534N 5082E alt. 3

17534N 5082E alt. 3 RWY 12-30 8000 X 400

Hayward Air Terminal 17329N 5145E alt. 47

RWY 10R-28L 5159 X 150 RWY 10L-28R 3536 X 75





alt. 7 RWY 11-29 10000 X 150 RWY 9R-27L 5212 X 150 RWY 15-33 3366 X 75 RWY 9L-27R 5453 X 150 ATIS: 128.5 or 126.0 (north fie

1LS 11 FREQUENCY: 111.9

1552 ft. .@LON

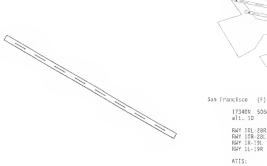
HEADING: 113 degrees ALTITUDE: 1722 ft. @LOM

ILS 29 FREQUENCY: 108.7 HEADING: ALTITUDE:

Palo Alto 17245N 5119E alt. 5 293 degrees

RWY 12-30

2500 X 65



San Carlos

17281N 5084E

alt. 2

RWY 12-30

17340N 5060E alt. 10 RWY 10L-28R RWY 10R-28L

10600 X 200 RWY 1R-19L 9500 X 200 RWY 1L-19R 7001 X 200

ATIS: 115.8

11870 X 200

1LS 28L FREQUENCY: 109.5 HEADING:

281 degrees 1735 ft. @LOM ALTITUDE: ILS 19L

FREQUENCY: 108.9 HEADING: 191 degrees 2600 X 75 ALTITUDE: 2628 ft. @ 8.6 DME



alt. 56 RWY 12R-30L 8899 X 150 RWY 12L-30R 4419 X 150

17185N 5164E

RWY 12L-30R 4419 X 150 RWY 11-29 3000 X 40

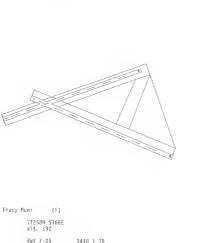
AT1S: 114.1 ILS 12R

FREQUENCY: 111.1 HEADING: 123 degrees ALTITUDE: 1798 ft. @LOM



San Jose, Reid - Hillview 17160N 5194E alt. 133

RWY 13L-31R 3101 X 75 RWY 13R-31L 3099 X 75



3680 X 100

RWY 11-29

```
Oakland (VOR)
       17365N 5124E
       freq. 116.8
Pajar (NDB)
       16978N 5131E
       freq. 327
Pigeon Point (NDB)
       17166N 4988E
       freq. 286
Point Reyes (VOR)
       1758BN 4975E
       freq. 113.7
Reiga (NDB)
       17287N 5292E
       freq. 374
Sacramento (VOR)
       17572N 5456E
       freq. 115.2
San Francisco (VOR)
       17340N 5060E
```

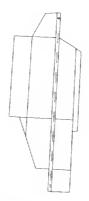
freq. 115.8

Concord (VOR)

17473N 5234E freq. 117

18 - 'STAR' SAN FRANCISCO San Jose (VOR) 17185N 5164E freq. 114.1 Sausalito (VOR) 17452N 5050F freq. 116.2 Scaggs Island (VOR) 17567N 5149F freq. 112.1 Travis (VOR) 17565N 5358F freq. 115.4 Woodside (VOR) 17233N 5054E freg. 113.9

AIRPORT	DIRECTORY SAN ERANGISCO AREA	CAN EDANCISCO ADEA CHADT		
AIRPORT DIRECTORY—SAN FRANCISCO AREA		SAN FRANCISCO AREA CHART		
Antioch Concord Bu Fremont Half Moon Bay Hayward Haitivermore Mountain View Oakland Oa Palo Alto San Carlos San Francisco San Francisco San Jose San Jose San Rafael Tracy Nor	AIRPORT NORTH EAST ALT □ use ILS IRPOWN <	FLIGHT SIMULATOR II REFERENCE CHART. NOT TO 8E USED FOR REAL WORLD AERIAL NAVIGATION. SCAGOS ISLAND 412.1 HAMILTON ARIAY ATIS 124.7 ANTIOCH		
orth	0° (clockwise) to compensate for nogonal coordinate grid overlaid on nbert conformal conic projection.	VORTAC OAKLAND NIMITZ FIELD OAKLAND NES NIMITZ FIELD OAKLAND NES OAKLAND NIMITZ FIELD OAKLAND NIMITZ FIELD NIMITZ FIELD OAKLAND NIMITZ FIELD NIMITZ FIELD OAKLAND NIMITZ FIELD		
LEGEND		ATIS 115.8		
87 4 O	Civil-Public use airport	1 SANCARLOS &		
®	Restricted Private-Nonpublic use airport, having emergency use or landmark value	HALF MOON BAY		
☆	Rotating light in operation, sunset to sunrise	33		
SANTA MONICA ATIS 119.15 175-50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	MOFFETT FIELD NAS SAN JOSE 114,1		
NAME FREOUENCY °	VOR	SAN JOSE INTL		
NAME FREQUENCY ♥	VORTAC (Distance Measuring Equipment Able)	REID-HILLVIEW		
NAME FREOUENCY ©	VOR DME			
NAME FREQUENCY O	Non Directional 8eacon	P. GEON POINT 286		
NAME FREOUENCY	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.			
AIRPORT NAME A88REVIATIONS		Nautical Miles 10 Statute Miles 5 10		
FLD	County Field	0 5 10		
INTL MUNI	International , Municipal			
(PVT)	Private Airport (prior permission before landing)			



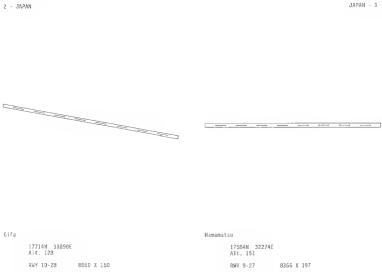
Atsugi

18118N 32707E Alt. 205

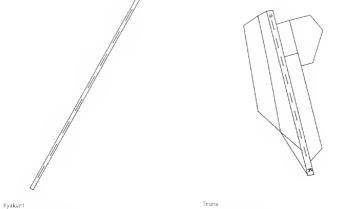
RWY 1-19 8000 X 150

ILS 1

FREQUENCY: 111.3 HEADING: 7 ALTITUDE: 1500 @ 4.1 DME



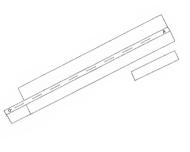
4 - JAPAN JAPAN - 5



19542N 32874E 19262N 32619E Alt. 209

RWY 3-21 8860 X 150 RWY 17-35 6562 X 148

6 - JAPAN JAPAN - 7



Komatsu

18042N 31572E Alt. 18

RWY 6-24 8860 X 150 ILS 6 FREQUENCY: HEADING: ALTITUDE:

110.1 61 1084 0 3,7 DME

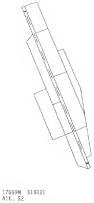
Matsumoto

18170N 32090E Alt. 2155

RWY 18-36

4920 X 100

8 - JAPAN JAPAN - 9



Nagoya

RWY 16-34

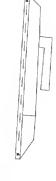
FREQUENCY: HEADING: ALTITUDE:

ILS 34

/		New Tokyo Int'l (Narita)			
	A	18375N 32940E Alt. 139			
		RWY 16-34 13123 X 200			
9000 X	150	ILS 16 FREQUENCY: 111.1 HEADING: 156 ALTITUDE: 1461 @ 3.9	DME		
(CY:	111.7 339 2312 @ 8.4 DME	ILS 34 FREQUENCY: 111.9 HEADING: 336 ALTITUDE: 1678 @ 4.5	DME		

JAPAN - 11 10 - JAPAN





Shimofusa

18334N 32819E Alt. 98

ILS 18

RWY 18-36

FREQUENCY: HEADING: ALTITUDE:

109.1 186 1998 @ 6.3 DME

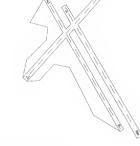
7380 X 200

RWY 14L-32R RWY 14R-32L 6000 X 150 9840 X 200

17267N 31528E Alt. 49

Osaka Int'l

12 - JAPAN JAPAN - 13



Tokyo Int'l (Haneda)

18201N 32787E Alt. 12

RWY 4-19 8200 X 150 10335 X 200 RWY 15L-33R

RWY 15R-33L 9840 X 150

ILS 33R 110.9 332 FREQUENCY: HEADING: ALTITUDE:

Yao

2966 @ 10.5 DME

17220N 31616E Alt. 33

RWY 9-27 4890 X 150 RWY 13-31 3940 X 100 14 - JAPAN JAPAN - 15



freq. 397 Akena (NDB) 17347N 31988E freq. 380 Ami (VOR) 18451N 32839E freq. 116 Atsugi (NDB) 18119N 32711E freq. 265 Chigasaki (NDB) 18055N 32712E freq. 236 Choshi (VOR) 18427N 33082E freq. 113.6 Daigo (NDB) 18765N 32751E freq. 225

Daigo (VOR)

18754N 32749E freq. 115.3

Aichí (NDB)

17633N 31976E

Yokota 18217N 32518E Alt. 457 RWY 18-36 11000 X 200

FREQUENCY:

HEADING:

ALTITUDE:

109.7

2114 @ 7 DME

357

ILS 36

Eda (NDB) Hyakuri (YOR) 18172N 32716E 18546N 32873E freq. 357 113.3 frea. Fukui (NDB) Itami (NDB)

Iwaki (VOR)

17930N 31549E freq. 400

Goboh (VOR) 16876N 31573E

freq. 116.9

17580N 32272E

17580N 32272E

18202N 32787E

18216N 32062E

18547N 32877E

freq. 366

frea. 116.5

frea. 387

freq. 114.7

freq. 229

Hamamatsu (NDB)

Hamamatsu (VOR)

Handeda (VOR)

Hotaka (NDB)

Hyakuri (NDB)

16 - JAPAN

325 17455N 32042E freq. 113.5

17276N 31516E

19002N 32866E

freq. 117.7

18048N 31571E

18043N 31569E

17467N 32025E

32578E 18289N

Kawakado (NDB)

Komatsu (NDB)

Komatsu (VOR)

Kowa (NDB)

Kowa (VOR)

freq. 251

freq. 234

freq.

freq.

freq. 205

JAPAN - 17

Kumagaya (NDB) Nagoya (NOB) 17666N 31933E 18372N 32530E

360 frea. freq. 240 Nagoya (VOR) Kushimoto (NDB) 17671N 31928E 16789N 31875F freq. 114.2

freq. 275 Nanki-Shirahama (NDB)

Kushimoto (VOR) 16792N 31879E

freq. 112.9

18 - JAPAN

Moriva (VOR)

18382N 32785F

freq. 114

Matsumoto (VOR) 18167N 32095E freq. 117.6

Mivakeiima (NDB) 17594N 32995F

freq. 260 Miyakejima (VOR)

17602N 32970E freq. 117.8

Miyazu (VDR)

17503N 31318E frea.

112.6

freq. 115.7 Osaka (NOB)

17247N 31588E freq. 340

16816N 31698E

18376N 32940E

freq. 117.3

18720N 32643E

18579N 32643E

18151N 33049E

freq. 389

freq. 114.8

freq. 394

Narita (VOR)

Nasu (YOR)

Nikko (NDB)

Onjuku (VOR)

JAPAN - 19

Osaka (VDR) Sakura (VOR)

Shinoda (VOR)

Shizuhama (VOR)

Tachikawa (NDB)

Tateyama (NOB)

Tateyama (VOR)

17155N 31587E

17696N 32452F

freq. 109.2

18251N 32630E

18003N 32927E

17986N 32942E

freq. 112.5

freq. 330

freq. 373

freq. 112.3

JAPAN - 21

17270N 31541E 18366N 32901F frea. 113.9 freq. 112.7 Oshima (NDB) Sekiyado (VOR)

17813N 32830E 18391N 32727E freq. 216 freq. 117

Oshima (VOR) Shinoda (NDB)

17812N 32830F 17153N 31584E freq. 113.1 freq. 219

17416N 31620E frea. 117.1

Rankin (NDB)

20 - JAPAN

Oshima Airport (NOB)

Otsu (NDB)

Otsu (VOR)

Sakura (NDB)

17843N 32800E

17436N 31631E

18131N 32677E

freq. 379

1833BN 32890E

freq. 350

freg. 368

freq. 392

Tokushima (VOR) 16897N 31367E freq. 114.9

Tottori (NDB) 17391N 30998F freq. 349

22 . JAPAN

Toyama (NDB) 18250N 31774E free, 354

Yao (NDB)

17217N 31618E freq. 386 Yokosuka (NDB)

18041N 32806E freq. 270

Yokosuka (VOR)

Zama (NDB)

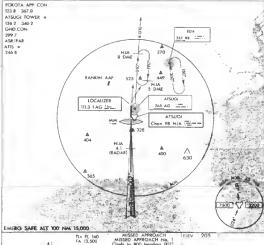
18060N 32787F freq. 116.2

freq. 401

18156N 32659F

APPROACH CHARTS

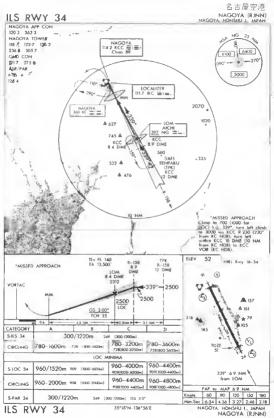
厚木飛行場 ATSUGI (RJTA) AYASE. HONSHU I., JAPAN



Climb to 900 heading 007", then climb to 2000 via R-010 (RADAR) proceed to 8 DME and hold 1500 -007 MISSED APPROACH No 1500 Climb to 2000 heading 007°, proceed to RB NDB and hold 300 £ TACAN Glide Slage 30' Δ 283 CATEGORY 184 311 S-ILS 01 377/730m 193 (200 800m) 377/1220m 193 (200-1200m) 660/1520m 660/1830m (660/1220m 474 (500-1200m) S-LOC 01 476(500-1600m) 476(500-2000m 660-1600m 700-1600m 720-2400m 760-3200m CIRCLING* 455(500 1600m) 495(500-1600m) 515(600-2400m) 555(600-3200m) 007" lo HIRL RWY 01 19 TACAN 405/730m 405/1220m S-PAR OI 221 (200-800m) GS 3.0° 221 (200-1200m) GS 3.0° *Circling NA E of Itwy 01/19

ILS

小松飛行場 KOMATSU (RINK) VOR/ILS RWY 06 KOMATSU, HONSHU I, JAPAN CAUTION KOMATSU APP CON Rapidly rising high terrore 120.1 261.2 east and south of runway GS Not usable below 280 MSL KOMATSU TOWER 126.2 236.0 GND CON 275 B ASR/PAR NIIGATA LOCALIZEF 110.1 I-KM ≦:= Chon 38 (169) · 495 4 DMF I-KM 7 3 DME (33) YARI 1169 KMC 866 25 10,900 FUKU ENROUTE FACILITIES EMERG SAFE ALT 100 NM 12,500 TLV FL 140 TA 13.500 ELEV 18 Left turn KMC VORTAC within 14 NM - 256°-4000 7.3 DMF Glide Slope 2000 4 DME TCH SE LKM 1084 MISSED APPROACH Climb to 500, Then left turn to 4000 out R-D15 Turn 1100 DME F right within 15 NA, return to KAC and hold GS CATEGORY 5-115 06 330-1400m (400 1400m) 420-1200m 420-1600m #20-2000m TDZE S-LOC 06 402 (500-1200m) (500-1600m) 402(500-2000) 500-1600m CIRCUNG 500-2000m 500-2400m 800-4400m 04 487 (500-1600m) 482(500-2000m) 482(500-2400m) 782(800-4400w 300/1220m S-PAR Od 282 (500-1200m) GS 25° FAF to MAP 3.7 NM if MM out Knots 90 120 150 180 200 Min-Sec 2:28 151 1:29 1:14 1:07



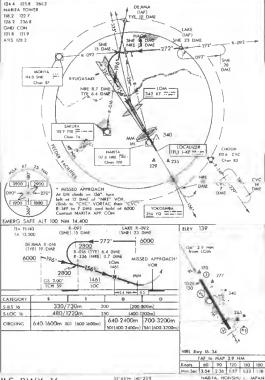
下総飛行場 SHIMOFUSA (RJTL) ILS RWY 18 SHIMOFUSA, JAPAN TOKYO APP CON CAUTION False GS into left of SHR R-011 inbd 126 0 261.2 10 Loc. SHIMOFUSA TOWER 138 3 284 6 126 2 228 2 458/P4R SHIMOFUSA Chan # SHT :::. 1130 **FOCAUZER** 1000 IOE HSH INT 396 656 4900 TSUG/ RADAR REQUIRED SHIT 14 DM A 927 SAFE ALT 100 NA 34,400 98 TEV FL 140 TA 13.500 MISSED APPROACH climbing turn to 1500 via R-153 Proceed to TSUGA SHT R-153 ٨ 1008 and hold TDZE TACAN 2000 мм 12 DME GS 3 0° TCH 58 330-1000m (300-1000m) HIRL Rwy 229 680/2300m 18 36 680/1400m 680/1200m S-LOC 587 587 587 (600-1200m) (600-1400m) 600-2300m 680/2400m 680/3200m 680/1600m CIRCLING 582 582 582 (600-1600m) (600-2400m) (600-3200ml FAF to MAP 5.1 NM Knots 120 . 150 180 3.24 2.33 2:02 1:42 SHIMOFUSA, JAPAN ILS RWY 18

35°48'N-140°01'E

SHIMOFUSA (RJTL)

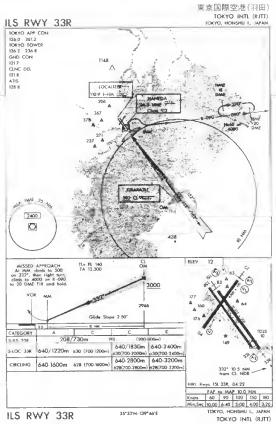
NARITA, HONSHU I. JAPAN

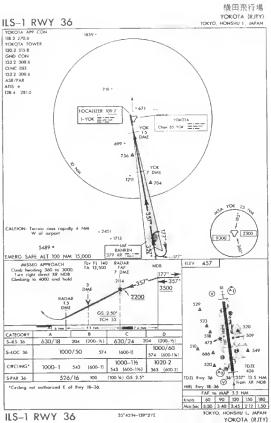
ILS RWY 16 NARITA APP CON



NEW TOKYO INTL (RJAA) ILS RWY 34 NARITA, HONSHU I., JAPAN 120 | 180 | 240 | 300 | 572 | 858 | 1144 | 1430 Knots | 60 V/V(fpm) | 285 NARITA APP CON 124 4 125 8 261 2 Required by ATC until reaching 2800' MARITA TOWER 118 2 122 7 HRE 126 2 236 B DME (76) GND CON 121 8 121 9 MORIVA ATIS 128 2 114 0 SNE CHQ5HI 111 9 I-YQ ==== 113 6 CVC A 340 Chan 33 KUZUMI 342 KF ... MM CVC NARITA 235 DME 256 YQ = UZ 3 NRE TO 229 Chee 120 DME MRE 12.5 DME (LAF) SNE 15 DME COURSEWAY NRE 14 DME FEEDER FACILITIES 1300 NRI DIME FACILITIES EMERG SAFE ALT 100 NM 14,400 MISSED APPROACH ELEV TA 13.500 COURSEWAY At OH climb on 336" turn right of 7 DME of "NRE" VOR, of or R-156 P-155 TLv FL 140 14 DMF HIRL Rwy 16-34 12.5 DME above 2800 to "CVC" VORTAC then "CVC" R-149 to 7 DME and hold at \$000 LOM 4000 Contact NARITA APP CON 1678 4000 L.VOR GS 3 00° TCH 59 277 1678 LOC CATEGORY á n S-ILS-34 339/730m 200 (200-800m) (500-1200m) 5-LOC 34 640-2400m 700-3200m 640-1600m 501 (600 1600m) CIRCLING 501(600-2400m) 541(600 3200m) 336" 4.6 NM from LOM FAE to MAP 4.6 NM 60 90 120 150 180 Knots 4:36 3:04 2.18 1.50 I;32 ILS RWY 34 NARITA, HONSHU I., JAPAN 35"45"N - 140" 23"E NEW TOKYO INTL (RJAA)

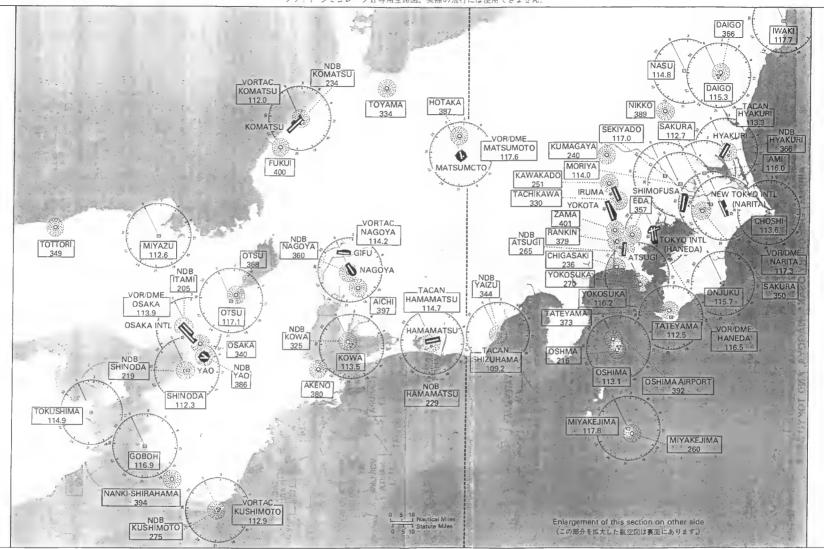
新東京国際空港(成田)





OSAKA, NAGOYA, AND TOKYO AREA CHART

フライト シミュレータ II 専用空路図。実際の飛行には使用できません。

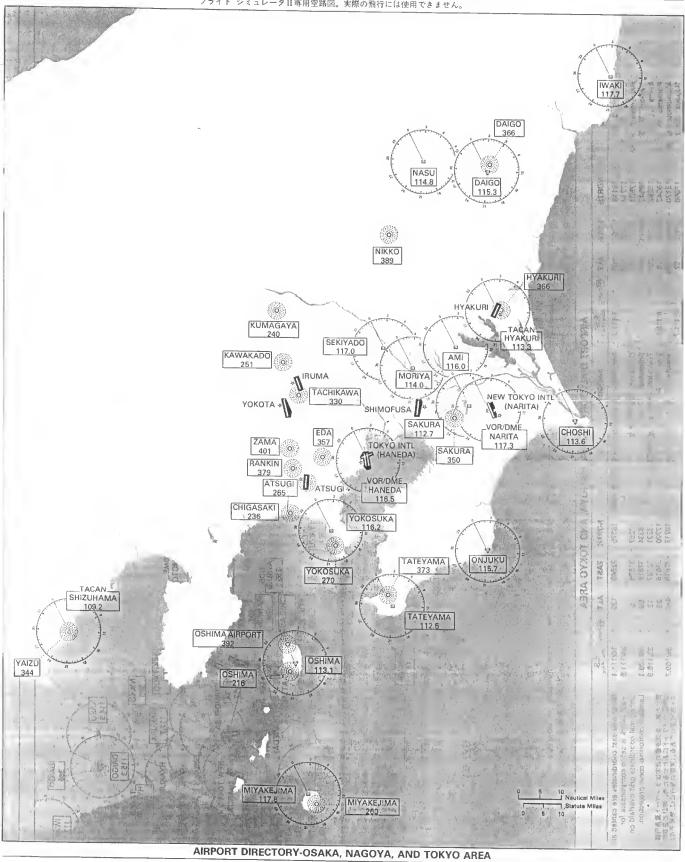


AIRPORT DIRECTORY-OSAKA, NAGOYA, AND TOKYO AREA

AIRPORT	NORTH	EAST	ALT.	F (Fuel)	ILS (Rwy/Freq.)	AIRPORT	NORTH	EAST	ALT.	F(Fuel)	ILS (Rwy/Freq.)	
Atsugi 厚 木	18118	32707	205	*	1/111.3	New Tokyo Intl. (Narita) 新東京国際空港(成田)	18375	32940	139	*	16/111.1	North and east coordinates are canted at
Gifu 岐阜	17714	31890	128								34/111.9	+ 26° (clock wise) to compensate for
Hamamatsu 浜 松	17584	32274	151			Osaka Intl. 大阪国際空港	17267	31528	49	*		orthogonal coordinate grid overlaid on
Hyakuri 頁 里	18542	32874	104			Shimofusa 下 ₩8	18334	32819	98	*	18/109.1	Lambert conformel conic projection.
fruma 入間	18262	32619	299	*		Tokyo Intl. (Haneda) 東京国際空港(羽田)	18201	32787	12	*	33/110.9	
Komatsu 小 松	18042	31572	18		6/110.1	Yao 八尾	17220	31616	33			表の北緯、東経座標の数字はランパート直角円錐
Matsumoto 松本	18170	32090	2155			Yokota 横 田	18217	32618	457	*	36/109.7	法地図のグリッドにあわせるため、時計と逆方向 に+26*修正してある。(実際の飛行には、使用不可)
Nagoya 名古屋	17669	31932	52		34/111.7							でするのが正してある。(美際の飛行には、使用不可)

ENLARGED SECTION OSAKA, NAGOYA, AND TOKYO AREA CHART

フライト シミュレータII専用空路図。実際の飛行には使用できません。



AIRPORT	NORTH	EAST	ALT.	F (Fuel)	ILS (Rwy/fing)	
Atsugi 厚 木 Hyakuri 百 里 Iruma 入 間 NewTokyoIntl.(Narita) 新東京国際空港(成田)	18118 18542 18262 18375	32707 32874 32619 32940	205 104 299 139	* *	1/111.3	North and east coordinates are canted a +26° (clock wise) to compensate for orthogonal coordinate grid overlaid on Lambert conformal conic projection.
Shimofusa 下 総 Tokyo Intl. (Haneda) 東京国際空港(羽田) Yokota 横 田	18334 18201 18217	32819 32787 32618	98 12 457	*	34/111.9 18/109.1 33/110.9 36/109.7	表の北韓、東経座標の数字はランパート直角円3 法地図のグリッドにあわせるため。時計と逆方向 に+26 修正してある。(実際の飛行には、使用不可

Maps by Michelle Maase & Ken Ruminski

details for large portions of Great Britain, France, and West Germany Several airports (and a few surprises) can also be found outside the three main detailed scenery areas, along with additional radio transmitters provided to aid in longrange navigation and cross-country flight. This Scenery Disk has enough generic cross-country scenery and highly-detailed (sight-seeing) scenery areas to keep you flying for a long time. The scenery was developed using the same documentation that pilots would use to navigate these areas. The following notes and recommendations will help you to explore these new scenery areas

"Western European Tour" includes the airports, radio nav-aids, and scenery

Southern Great Britain Detailed airports include Bournemouth, Cardiff, Heathrow (London), Luton, and

Nanwich

City of Interest: London Parliament 18659N

Westminster Abbey

Tower Bridge 18661N 13759E

Tower at Landon

Buckingham Palace 18660N 13742F

Hyde Park with Serpentine Pond

Post Office Tower

St. Paul's Cathedral

City lights at dusk and night

Thames River

18570N 13245E

Stonehenge Site

Chalk Figures (prehistoric and recent) Whinshade Lion 18817N 13657E

Uffington White Horse 18743N 13369E

Westbury White Horse 18633N 13209E

Long Man of Wilmington 18365N 13788E

Lighthouse beacons along South England coast

Note to 68000 FS2 Users After loading the Atari ST/Amiga Flight Simulator II (or Macinlosh Microsoft Flight Simulator) program, you start out on Oakland Runway 27R. When you log-in the "Western European Tour" Scenery Disk you will automatically be transported to Heathrow Airport in London. You may return to Heathrow any time after this by selecting the prerecorded situation for Oakland 27R from the SITUATION menu Northern France Detailed airports incude Caen, Le Touquet, Lille, and Charles de Gaulle (Paris).

City of Interest: Paris Arc de Triomphe

Montmartre Hill Fiffel Tower

Tour Montpamasse

Notre Dame Cathedral

lle St. Louis (island in the river) Seine River City lights at dusk and night Bois de Bouloane (park) Bois de Vincennes (park) Jardin du Luxemboum (nark) Place des Invalides (park) Champ de Mars (park) Pere Lachaise Cemetery Southern West Germany

Concorde Obelisk

Louvre Museum

City of Interest, Munich Olympiaturm Tower

Frauenkirche

Residenz

Olympic Grounds (park) Hauptbahnhof

Deutsches Museum

Isar River with relande Theresienwiese beer garden (park)

Sacre Goeur Cathedral 17441N 17430N

17423N 17433N 17430N 17426N

17437N

14268E 14269F

14254F

14269E

14254E

14261E

14261F

Detailed airports include Frankfurt and Neuhihem. 17028N

> 17015N 16835F

17014N

17015N

17011N

15832F

18830F

16841E

16842E

Hotgarlen (park)				
City of Interest, Nurnberg Fernmeldeturm Tower Pegnitz River with parks		17553N	16676E	
City of Interest: Stuttgart Fernsehlurm Tower Schlossgarten (park) Two adjacent mountains	-	17269N	16172E	
City of Interest: Frankfurt				
Femmeldeturm Tower Palmengarteri (park)	-	17854N	16030E	
Opera House	-	17845N	16034E	
Cathedral Skyline buildings Zoologischer Garten (park) Three mountains (northwest	of city	17841N	16040E	

Europe

Included is a map of Europe that shows the radio aids located outside of the three main detailed scenery areas. Use these radio aids to navigate between areas.

Several additional Europe scenery details are also available. Helsinki (Finland) Almont is located at:

22508N 19462E

City of Interest: Strasbourg, France Rhein River and canals Jardin Botanique (park) Orangerie (park) Three mountains (southwest of city)

Englischer Garten (park)

This airport includes refueling facilities.

The city of Moscow is a lice accurately located inside Russia. While we could have listed the exact city coordinates, we thought it might be more interesting for you to try end locate Moscow for yourself (see following). City scenery includes the Kramfin Wall and park, "Red Square", several other parks, a river, and several small lakes. Numbera to Helsinki It's just possible to fly from Nurnberg, West Germany to Helsinki, Finland with

17586N 16691E

a full load of fuel. Start out at Numberg Airport:

Take off and turn to a heading of 36 degrees. Level out at 5,000 feet, then cut your airspeed to 120 knots to conserve fuel. Your magnetic compass heading will lend to drift as you fly east, so be sure to keep yourself on a constant 36degree heading. Also, make sure to keep your airspeed at or below 120 knots: it you fly any taster than this, you will probably run out of tuel and splash into the Baltic Sea before reaching Finland! Keep your eyes open and start scanning the horizon for Helsinki Airport as soon

as you cross over into Finland. The airport is approximately 20 minutes inland from the coast and is the only scenery detail in the entire country, so it should be relatively easy to locate if you fly anywhere near if. With any luck you should be able to find and land at Helsinki Airport with about twenty minutes of fuel left in your tanks The tlight from Numberg to Helsinki takes about six hours at 120 knots, gear up.

Helsinki to Moscow

flans off at an altitude of 5,000 feet

Your success in fiving nonstop from Numberg all the way to Helsinki, Finland on a single tank of fuel has won you much notoriety, and strengthened your resolve to attempt an even greater feal, a secret, unauthorized solo tight from Helsinki to Moscow, deep in the Russian headland After refueling your aircraft, you find yourself sitting on the nurway and cleared

for takeoff from Helsinki Airport at coordinates: 22508N 19462F

Take off and turn to a heading of 130 degrees. No radio pay-aid information is available for this flight, but you've determined that if you stay on this heading you should come near enough to Moscow for you to see and identify it visually. Your magnetic compass will tend to fluctuate as you fly from west to east, so make

sure you maintain a 130-degree heading. The flight from Helsinki to Moscow should take about three and one half hours at 135 knots, gear up, flaps off, at an altitude of 5,000 feet.

Find Moscow's Red Square (the Easy Way)
You've landed your airplane in a remote area of western Russia:

21739N

5.000 leet. Good luck!

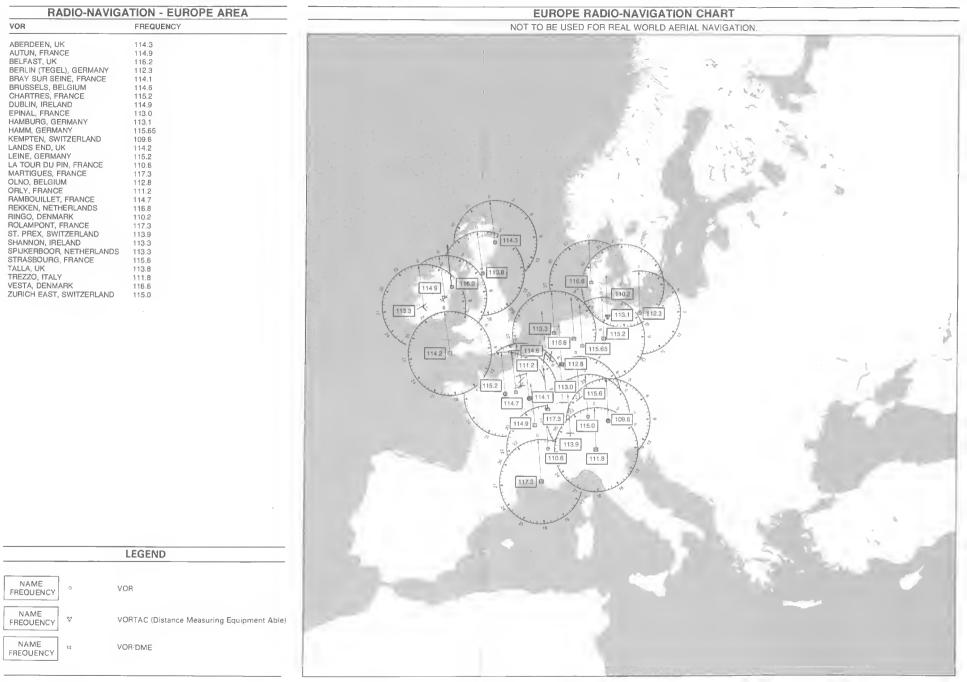
22124F

and have taken some time to relax and wander the countryside. Presently you arrive at a nearby village, where the triendly townsfolk inform you that you are very near Moscow end, of course, you shouldn't pass up this opportunity to see the nation's capital. The villagers assure you that the pecole of Moscow are very

tranchy and will warmly welcome someone who has made such a long light to visit hem. They also suggest that perhaps you could land in Red Square near the Kremin. As the support of the property of the support of the support of the Seither you not hely have any radio pay-aid intermation, but they tell you that if you take of it and follow a southeast heading you should be able to spot the out. If you have of the support of the support of the support of the support of the of the branch of the support of the support of the support of the climb back into your plane to depart. Their is to Moscow from this location should take about 45 minutes at 130 knots, over you. Base of at an attitude of all the about 45 minutes at 130 knots, over you. Base of at an attitude of all the support of th

Above all else, explorel A lot of work went into this project. We hope that you enjoy the results as much as we do?

Special thanks to Dave Robins and British Airways AERAD for providing documentation used in the development of this Scenery Disk.



Abbeville (YOR) 17997N 14192E freg. 116.6

NORTHERN FRANCE - 1

Abbeville 17998N 14192F

Amiens

alt. 220

alt. 197

RWY 3-21 5247 X 163

17862N 14333E RWY 12-30 4132 X 85

Autust, France (VOR) 16519N 14723E

freq. 114.9

Beauvais 17692N 14235E alt. 358

RWY 13-31 7970 X 170 RWY 5-23

3627 X 150

Berck-Sur-Mer 18127N 14142E alt. 30 RWY 6-24

2951 X 196 1967 X 196

RWY 18-36 Bernay / St. Martin

17598N 13776E alt. 551

RWY 10-28 RWY 17-35

3017 X 327 2787 X 327



Berry Head (VOR)

18339N 12804E freq. 112.7



18203N 14240E freg. 113.8

Bray sur Seine, France (VOR)

17205N 14519E freq. 114.1



Bretigny

17316N 14253E alt. 269 RWY 5-23

RWY 12-30

9839 X 327 5739 X 196 Brussels, Belgium (VOR)

5431 X 150

3870 X 98



114.6 freq.

Caen (F) 17673N 13497E

18233N 14929E

alt. 256 RWY 13-31 RWY 6-24

frea.

alt. 10 RWY 7-25

115.4

17657N 13550E



Caen (VOR)

Calais

18348N 14272E

4992 X 150

17315N 13860E freq.

Deauville

Chartres 17285N 14011E alt. 508

RWY 10-28 2755 X 150

Chatillon (VOR) 17509N 14631E 117.6 freq.

Cherbourg 17927N 13245E alt. 456

4 - NORTHERN FRANCE

8003 X 150

RWY 11-29

Costa, Belgium (VOR) 18445N 14641E frea.

Diekirch, Luxembourg (VOR)

17759N 15339E. freq.

Detling (VOR)

114.4 Dieppe (VOR)

> freq. 115.8

freq. 117.3

17930N 13998E

17699N 13721E

17730N 13680E

18555N 13921E

frea. 110.2

alt. 479 RWY 12-30

6887 X 150

NORTHERN FRANCE - 5

6 - NORTHERN FRANCE Dieppe

Dover (VOR) 18474N 14110E freq. 114.95

Epinal, France (VOR) 17/18N 15280E freq.

Evreux (VOR)

17542N 13959E 112.4 freq.

Goodwood (VOR)

freq. Hamm, Germany (VOR) 18588N

> freq. 115.65

114.75

15800E

18415N 13546E

freq.

Le Havre

Lands end (VOR)

17804N 13672E alt. 312

18341N 12224E

114.2

RWY 5-23

Le Mans 17125N 13607E

alt. 194 RWY 3-2I

Le Touquet (F)

18165N 14159E alt. 36 RWY 14-32

RWY 7-25

7379 X 131

4624 X 98

6887 X 131

3935 X 131

NORTHERN FRANCE - 7

2689 X 196

RWY 13-31

17915N 13970E alt. 344

8 - NORTHERN FRANCE Lille (F)

18138N 14562E alt. 157 RWY 8-26 9269 X 150 RWY 2-20 4263 X 98

London (VOR)

18665N 13657E 113.6 freq. Lydd (VOR)

18421N freq.

Mantes (VOR)

17508N 14032E freq.

Midhurst (VOR)

18492N

freq.

Montdidier (VOR) frea.

14344E

113.6

13593E

114.05

13979E

Ockham (VOR)

18590N 13651E frea. 1153

Nicky, Belgium (VOR)

Montmedy, France (VOR) 15052E

Monts d'Arree, France (VOR) 17445N 12597E freq.

> 18346N 14855E freq. 117.4

109.4

Olno, Belgium (VOR) 18085N 15245E

freq.

frea.

112.8 Orly (VOR)

17368N

14270E

NORTHERN FRANCE - 9



11807 X 150

17490N 14331E

alt. 387

Paris, Orly

Pontoise (VOR)

Rambouillet (VOR)

alt. 292

RWY 7-25

RWY 2-20

RWY 8-26

17540N 14195F freq. 111.6

14157E 114.7 freq.

RWY 9-27

RWY 7-25 8003 X 150 RWY 2-20 6999 X 150 RWY 8-26 3503 X 131





H971 X 150 7871 X 196 10889 X 150



Rouen

17697N 13970E alt. 515 RWY 5-23

113,35 freg.

115.6 freq.

1757IN 14772E

Rolampont, France (VOR) 16953N 15048E freq. 117.3

freq. 112.3

Seaford (VOR)

18345N 13770E 117 freq.

Southampton (VOR) 18346N 13770E

Strasbourg (VOR) 17172N 15717E

4099 X 98





12 - NO	ORTHERN FRA	NCE	
Toussus	Le -Noble		
	17390N 141941 alt. 538	E	
	RWY 8-26 RWY 8-26	3607 X 98 3443 X 98	

AIRPORT DIREC	TORY - NORTHERN FRA	CE ENLARGED SECTION NORTHERN FRANCE AF	REA CHART
CITY AIRPORT	NORTH EAST ALT.	ILS NOT TO BE USED FOR REAL WORLD AERIAL NAVIG	
Abbeville Abbeville Amiens Glisy Tille Berck-Sur-Mer Bemay St. Martin Bretigny Caen Carpiquet Calais Dunkerque Chartres Capuville St. Gatien Dieppe St. Aubin Octeville Le Havre Octeville Le Havre Arnage Le Touquet Lille Lesquin Carles De ATIS Paris ATIS Paris Coly Rouen Toussus-Le-Noble Toussus-Le-Noble	17998	28/109.1 MIDHURST 114.95 BOULOGNE 113.8 DEEPPE'ST. AUBIN DEAUVILLE'ST, GATIEN DOVER 114.95 CALAIS/DUNKEROUE 114.95 BOULOGNE 113.8 ABBEVILLE 116.6 ABBEVILLE 116.6 ABBEVILLE 116.6 AMIENS GLIS MO	AGE LILLE/LESOUIN BRUSSELS, BELGIUM 114.6 CAMBRAI 112.6
	LEGEND	CAEN 115.4 BERNAY ST. MARTIN EVREUX 112.4 PONTOISE 18 111.6	REIMS 1123
£7 4 0		PARISIC	CHARLES DE GAULLE
8	Civil-Public use airport Restricted/Private-Nonpublic use ai having emergency use or landmar		CHATILLON 117.6
SANTA MDNICA ATIS 119.15 175-50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundred		COULOMMIERS 112.9
NAME FREOUENCY ©	VDR	CHARTRES	
NAME FREOUENCY ®	VDRTAC (Distance Measuring Equi	CHAHIHES/CHAMPHOL	
NAME FREOUENCY	VOR/DME	© LE MANS/ARNAGE	BRAY SUR SEINE
NAME FREOUENCY O	Non Directional Beacon		118
VOR/DME NAME FREQUENCY	If VOR falls directly on an airport, onl symbol will be shown. The VOR facilishown at the top of the box.		

Allersberg (VOR) 17466N 16733F frea. 111.2

Augsburg Mulhausen 17I32N 16657E

Baden-Baden/Ons

alt. 1512 RWY 7-25 4198 X 98

17289N 15893E

RWY 4-22 RWY 4-22 3279 X 98

alt. 403

Bayreuth (VOR) 17795N 16838E

freq. 110.6

Berlin (Tegel), Germany (VOR)

18893N 17217E

freq. 112.3

18233N 14929E freq. 114.6

Brussels, Belgium (VOR)

4198 X 98

SOUTHERN WEST GERMANY - 1

17759N 15339E freq. 114.4 Dinkelsbuhl (VOR)

Frankfurt (F) 16463E

17433N freq. Donaueschingen/Villingen

16943N 15980E alt. 2227 RWY 18-36 4231 X 65

2 - SOUTHERN WEST GERMANY

Egelshach

17779N 16028E alt. 384

RWY 9-27 2951 X 85

Epinal, France (VOR) 17118N 15280E frea.

alt. 364

RWY 7-25 RWY 7-25 RWY 18-36 Frankfurt (VOR) 17818N

> 17176N 17541E

freq.

17645N 16713E

17803N 15997E

frea.

16027E

114.2 frea. Freistadt, Austria (VOR)

13119 X 196

SOUTHERN WEST GERMANY - 3















Hamm, Germany (VOR)

18588N 15800E 115.65

4 - SOUTHERN WEST GERMANY

freq.

Karlesruhe 17368N 15935E

alt. 380 RWY 3-21

RWY 3-21

Karlsruhe (VOR)

16006E

17370N frea

115.95

Kempten (VOR)

1684IN freq.

frea.

Kitzingen (VOR)

16496E

109.6

17686N 16451E 111.4

3115 X 98 2623 X 98

Leine, Germany (VOR)

18750N 16357E freq.

Luburg (VOR)

17336N 16213E freq. 109.2

115.2

La Tour du Pin, France (VOR)

frea. 110.6

15923N 15034E

Mannheim/Neuostheim

17572N 15993E alt. 308

17579N

frea.

Munich (VOR)

RWY 9-27 3279 X 85 RWY 9-27 2295 X 98

Montmedy, France (VOR)

SOUTHERN WEST GERMANY - 5







16933E

112.3 freq.

6 - SOUTHERN WEST GERMANY

17016N 16876E

alt 1738 RWY 7-25

Neubiberg (F)

Munich

9197 X 196

16989N 16858E alt. 1811

RWY 7-25 8003 X 91

Numberg (VOR) 17595N 16619E

117.4 freq.

Numberg

17586N 16691E alt. 1046 RWY 10-28

8855 X 150

Rekken, Netherlands (VOR) 18727N 15552E freq. 116.8

Roding (VOR)

17403N 17095E freq. 114.7

117.3

113.3

Rolampont, France (VOR) 16953N 15048E frea.

Spijkerboor, Netherlands (VOR) 18913N 15069E

freq. St. Prex, Switzerland (VOR)

16330N 15355E

freq. Strasbourg (VOR)

17172N 15717E

freq. 115.6

Olno, Belgium (VOR)

18085N 15245E frea.

Strasbourg 17188N 15734E. alt. 502 RWY 5-23 7871 X 150 Stuttgart 17241N 16176E alt. 1299 RWY 8-26 8363 X 163

Tango (VOR) 17214N 16189E freq. 112.5 Trezzo, Italy (VOR)

8 - SOUTHERN WEST GERMANY

15912N 16248E freg. 111.8

Tulln, Austria (VOR) 17I39N 18D69E

freq. 111.4 Zurich East, Switzerland (VOR)

> 16770N 16051E freq. 115

AIRPORT DI	RECTORY - SOUTHERN WEST GERMANY	ENLARGED SECTION SOUTHERN WEST GERMANY AREA CHART
	AIRPORT NORTH EAST ALT, F ILS	NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Baden Donaueschingen Egelsbach Frankfurt Friedrichshafen Karlesruhe Mannheim Munich Munich Numberg Strasbourg	Mulhausen 17132 16657 1512 Baden-Baden/Oos 17289 15893 403 Villingen 16843 15980 2227 Baden-Baden/Oos 16984 15980 2227 Egelsbach 17779 16028 384 Baden-Baden/Oos 384 Baden-Baden/Oos 25L/110.7 Friedrichshafen 16813 16258 1364 - 25L/110.7 Forchheim 17368 16935 380 Baden-Baden/Oos Ba	
less than 3° (clocks	10 20 30 40 50 10 20 30 40 50 20 40 60 80 100 dinates are canted at wise) to compensate linate grid overlaid on conic projection.	FRANKFURT 114.2 MAIN O EGELSBACH 6 CHARLIE
	LEGEND	115.5 KITZINGEN B FRIANGEN ERLANGEN
87 0 O	Civil-Public use airport	NURNBERG 114.9
®	Restricted/Private-Nonpublic use airport, having emergency use or landmark value	NEUOSTHEIM
SANTA MONICA ATIS 119.15 175-50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	KARLSRUHE 115.95 LUBURG ALLERSBERG 111.2
NAME FREQUENCY	VOR	FORCHHEIM DINKELSBUHL 117.8 RODING 114.7
NAME FREQUENCY	VORTAC (Distance Measuring Equipment Able)	BADEN-BADEN/OOS
NAME FREQUENCY	VOR/DME	STUTTGART 6 TANGO 112.5
NAME FREQUENCY	Non Directional Beacon	STRASBOURG 115.6 MULHAUSEN MULHAUSEN ERDING 113.6
VOR/DME_ NAME FREQUENCY	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.	MUNICH NEUBIBERG 112.3

Abbeville (VOR) 17997N 14192E freq. 116.6

Belfast, UK. (VOR)

20117N 12537E

freq. 116.2

SOUTHERN UNITED KINGDOM - 1

Bembridge 18356N 13445E

alt. 56

RWY 12-30 2742 X 72

Berry Head (VOR) 18339N 12804E freq. 112.7

19110N 13388E

Birmingham Intl.

alt. 325

RWY 15-33 7399 X 150

RWY 6-24 4316 X 150

Boulogne (VOR)

18203N 14240E freg. 113.8

Bournemouth (Flurn) (F)

18426N 1326IE alt. 36 RWY 8-26

2 - SOUTHERN UNITED KINGDOM

RWY 17-35 Bovington (VOR)

13649E

6028 X 150

4841 X 150

6592 X 150

3207 X 150

18766N frea. 113,75 Brecon (VOR)

> 18871N 12957E 117.45 freq.

Bristol Airport

18709N 13074E alt. 620 RWY 9-27

RWY 15-33

Brussels, Belgium (VOR)

18233N 14929E freq. 114.6

freq.

Cambrai (VOR) 17987N 1456E

Cardiff (F)

18743N 12912E alt. 220

18940N 13857E.

alt. 49

RWY 6-24

Clacton (VOR)

18763N 14086E 114,55

Compton (VOR)

18694N freq.

Costa, Belgium (VOR)

18445N freq. 111.8

13463E

SOUTHERN UNITED KINGDOM - 3

6441 X 150

Cambridge

RWY 12-30 RWY 3-21

7721 X 150 3667 X 98



free.

114.35

14641E

18911N 13649E

Dover (VOR)



Dublin, Ireland (VOR)

19685N 12334E 114.9 freq.

18475N 12846E alt 102

RWY 8-26

RWY 13-31

Daventry (VOR)

18973N

alt. 364

RWY 4-22

RWY 8-26

RWY 18-36

freq. 1164

Deauville (VOR)

freq. 110.2

Detling (VOR) 18555N freq.

Diekirch, Luxembourg (VOR)

17759N 15339E freq. 114.4

Dieppe (VOR) 17930N 13998E freq. 115.8

1392IE

17699N 13721E

13532E

5930 X 150

5989 X 150

2033 X 59

Gam (VOR)

Exeter

19420N 13636E 112.8 freq. Gloucester / Cheltenham

18896N 13249E

alt. 95

Goodwood (VOR) 18415N 13546E

freq. 114.75

RWY 18-36 RWY 9-27

2295 X 91 4664 X 118

6828 X 150 4395 X 150

SOUTHERN UNITED KINGDOM - 5

RWY 4-22

3188 X 131

SOUTHERN UNITED KINGDOM - 7

Halfpenny Green

19155N 13264E alt. 292

RWY 4-22 2099 X 72 2492 X 72 3863 X 72 RWY 10-28 RWY 16-34

Hamm, Germany (VOR)

18588N 15800E 115.65 freq.

Heathrow (F)

18657N 13660E

alt. 79 RWY 10-28

12798 X 150 RWY 10-28 11998 X 150 7734 X 150

RWY 5-23 Honiley (VOR)

> 19066N 13405E freq. 1129

Ipswich

18837N 14108E alt. 128

RWY 8-26 3417 X 341 2984 X 301 RWY 14-32

18710N freq.

13823E 115.6

Lands end (VOR)

Lambourne (VOR)

18341N 12224E 114.2 freq.

18665N freq.

London - Gatwick 18517N 13709E

alt. 203

RWY 8-26 RWY 8-26

Luton (F)

Lvdd (VOR) 18421N

18822N 13703E alt. 525

RWY 8-26 RWY 18-36

freg.

7084 X 150 2282 X 131 RWY 6-24 1285 X 85



13657E 113.6





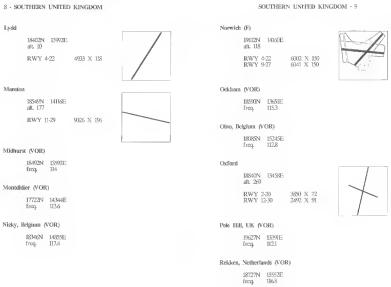


8416 X 150

10364 X 150



13979E 114.05



10 - SOUTHERN UNITED KINGDOM

18345N 13770E

19567N 11619E 113.3 freq.

Shannon, Ireland (VOR)

117 freq.

Southend

18663N 13960E alt. 49 RWY 6-24

5261 X 118 RWY 15-33

3712 X 91

SOUTHERN UNITED KINGDOM - 11

Shoreham

Seaford (VOR)

1839IN 13666E alt. 7 RWY 3-21

Southamoton (VOR)

18346N 13770E freq.

Southamp(on

18477N 13397E alt. 43 RWY 2-20 5648 X 118

2702 X 59

Spijkerboor, Netherlands (VOR)

18913N 15069E

freq. 113.3 Stu (VOR)

> 1906@N 12529E 113.1

freq. Talla, UK (VOR)

> 20408N 13209E 113.8 freq.

AIRPORT DIRECT	TORY - SOUTHERN UNITED KINGDOM	ENLARGED SECTION SOUTHERN UNITED KINGDOM AREA CHART
CITY AIRPOR		NOT TO BE USED FOR REAL WORLD AERIAL NAVIGATION.
Bembridge Isle of W Birmingham Bournemouth Hurn Bristol Bristol Cambridge Cardiff Cerdiff Cranfield Cranfield Cranfield Exeter Gloucester Halfpenny Green Ipswich London Gatwick London Heathrov ATIS Luton Lydd Lydd Manston Morwich Norwich Norwich Shoreham Southams Southam Southam Southend	ham Intl 19110 13388 325 18426 13261 36 * Airport 18709 13074 620 dge 18940 13857 49 dd 18911 13649 364 18475 12846 102 ham 18896 13249 95 19837 14108 128 18517 13709 203 w 18657 13660 79 *10L/110.3 121.85 18822 13703 525 * 18402 13992 10 1 18549 14116 177 19102 14160 118 * on 18840 13458 269 nn 18840 13458 269 nn 18847 13666 7 nplon 18477 13397 43	GAMSTON 112.8 NORWICH HALFPENNY GREEN BIRMINGHAM INTL HONILEY 112.9 CRANFIELD CRANFIELD CRANFIELD CHELTENHAM CHELTENHAM
Nautical Miles 0 10 Statute Miles 0 10 Statute Miles 0 20 Kilometers 0 20 North and east coordinates approximately 8° (clockwist for orthogonal coordinate grill Lambert conformal conic pro	are canted at e) to compensate id overleid on	DOVER 113.35 BRISTOL BRISTOL BRISTOL BRISTOL COMPTON 114.95 LONDON-HEATHROW OCKHAM 115.3 DETLING 117.3 DOVER 114.95 SOUTHAMPTON 113.35 BOURNEMOUTH (HURN) ** SOUTHAMPTON SHOREHAM EXETER
ध्य ०	Civil-Public use airport	× A STATE OF THE S
Ą	Restricted/Private-Nonpublic use airport, having emergency use or landmark value	BEMBRIDGE (ISLE OF WIGHT) BOULOGNE
SANTA MONICA ATIS 119.15 175-50	Airport Name Advisory Frequency (if available) Elevation (feet) — Length (hundreds of feet)	BERRY HEAD 112.7
NAME FREOUENCY ©	VOR	The second secon
NAME FREOUENCY &	VORTAC (Distance Measuring Equipment Able)	
NAME FREOUENCY	VOR/DME	
NAME FREQUENCY 0	Non Directional Beacon	
VOR/DME_ NAME FREOUENCY	If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.	

BARBERS POINT 13384N 60862E

alt 33 RWY 11-29 8410 X 200

RWY 4-22 8335 X 200 RWY 4-22 8335 X 200

BARKING SANDS PMRF

13695N 60174F

alt. 16

RWY 16-34 6010 X 150

BRADSHAW (BSF) (NDB)

12724N 61872E freq. 339

DILLINGHAM

13496N 60210E

alt. 16

RWY 8-26 9000 X 75

FORD ISLAND ALF HI 23 13409N 60905E 13671N 60318E

alt. 479

RWY 8-26

RWY 4-22

RWY 4-22

12000 X 200

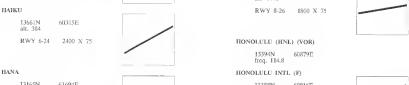
9000 X 150 6950 X 150

HAWAII - 3

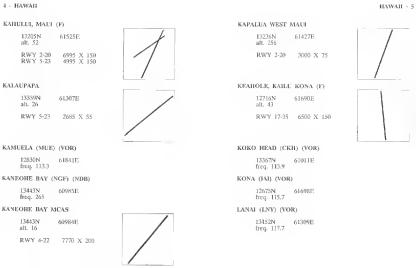
2 - HAWAII

alt. 16

RWY 4-22 4005 X 55	RWY 7-25 2000 X 75	
GENERAL LYMAN FLD, HILO (F)	HILO (ITO) (VOR)	
12707N 62094E alt. 39	12711N 62112E freq. 116.9	
RWY 8-26 9800 X 150 RWY 3-21 5605 X 150	HONOKAA 12864N 61907E alt 1440	
IIAIKU	RWY 8-26 1800 X 75	
13661N 60315E alt. 384		



13165N 61694E 13388N 60916E alt. 75 alt. 13 RWY 8-26 3610 X 100 RWY 8-26 12360 X 150











61226F





MOLOKAI (MKK) (VOR) 13311N

freq 116.1

13317N

alt. 453

MOUNTAIN VIEW



PAHOA (POA) (NDB) 12634N 62129E freq. 332

MAUNA KEA HONOLII

12730N 62058E alt. 1401

freq. 113.5

LIHUE, KAUAL (F)

13673N

alt. 148

RWY 3-21

MAUL (OGG) (VOR)

13209N

freq. 114.3

RWY 7-25

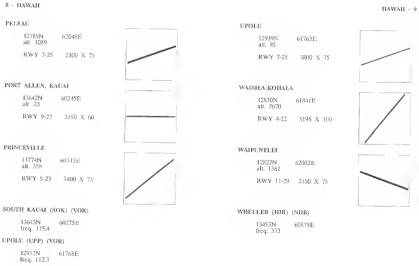
61525E

60349E

6005 X 150

RWY 17-35 6500 X 150

1800 X 75



AIRPORT DIRECTORY - HAWAII AREA CHART								
AIRPORT	ISLAND	NORTH	I EAST	ALT	FUI	a.ILS	ATIS	VASI
Barbers Point	Oahu	13384N	60862E	33				
Barking Sands PMRF	Kauai	13695N	60174E	16				
Dillingham	Oahu	13495N	60810E	16				
Ford Island ALF	Oahu	13409N	60905E	16				
General Lyman Fld	Hawaii	12707N	62094E	39	*	110.70/26	126.4	8.26.3
Haiku	Kauai	13661N	60315E	384				
Hana	Maui	13165N	61694E	75				
HI 23	Kauai	13871N	60318E	479				
Honokaa	Hawaii	12864N	61907E	1440				
Honolulu Intl	Oahu	13388N	60916E	13	*	109.50/8L	127.9	8R,26L,4L, 26R,4R,22L
Kahului	Maui	13205N	61525E	52	*	110.10/2	128.6	2,20,5
Kalaupapa	Molokai	13339N	61307E	26				
Kaneohoe Bay MCAS	Oahu	13443N	60984E	16				
Kapalua West Maui	Maui	13235N	51427E	16				
Keahole	Hawaii	12716N	61690E	43	•	109.70/17	127.4	17,35
Lanai	Lanai	13162N	61318E	1309				
Lihue	Lihue, Kauai	13673N	60349E	148		110.90/35	127.2	17,35,3,21
Mauna Kea Honolii	Hawaii	12730N	62058E	1401				
Molokai	Molokai	13317N	61254E	453			128.2	
Mountain View	Hawati	12636N	62076E	1499				
Peleau	Hawaii	12789N	62048E	1089				
Port Allen, Kauai	Kauai	13642N	60245E	23				

60313E 358

61763E 95

12939N

Kauai

Hawaii

Hawaii

Hawaii

Upolu

Waipunelei

Waimea-Kohala

SANTA MONICA

ATIS 119.15

NAME

FREQUENCY

NAME

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VOR/DME

NAME

FREQUENCY

175-50

12830N 61841E 2870 12822N 62002E 1361 LEGEND Civil-Public use airport Restricted/Private-Nonpublic use airport, having emergency use or landmark value Rotating light in operation, sunset to sunrise Airport Name Advisory Frequency (if available) Elevation (feet) - Length (hundreds of feet) VOR VORTAC (Distance Measuring Equipment Able) VOR/DME Non Directional Beacon If VOR falls directly on an airport, only the airport symbol will be shown. The VOR facility type is shown at the top of the box.

HAWAII AREA CHART

